

**DRAFT ECONOMIC ANALYSIS
OF
CRITICAL HABITAT DESIGNATION
FOR THE CALIFORNIA GNATCATCHER**

-2

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May 2000

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PREFACE

This report was prepared for the U.S. Fish and Wildlife Service (FWS) by Industrial Economics, Incorporated (IEc) to assess the economic impacts that may result from designation of critical habitat for the California gnatcatcher (*Polioptila californica californica*). IEc worked closely with FWS personnel to ensure that both current and future land uses were appropriately identified and to assess whether or not the designation of critical habitat would have any net economic affect in the regions containing the proposed critical habitat designations. To better understand the concerns of stakeholders, IEc reviewed comments submitted by public stakeholders in response to the proposal to designate critical habitat for the gnatcatcher. In some instances, IEc contacted stakeholders directly for additional information. After identifying current and planned land uses, IEc solicited input from FWS officials concerning whether or not any of these projects would likely result in an adverse modification determination without an accompanying jeopardy opinion. It is important to note here that it would not have been appropriate for IEc to make such policy determinations. Identification of these land management/use actions provided IEc with a basis for evaluating the incremental economic impacts due to critical habitat designation for the gnatcatcher.

Due to the availability of economic data and limited time in conducting this analysis, we do not provide quantitative estimates of economic impact. Rather, we identify significant categories of economic impact expected to be attributable to critical habitat designation. We then describe these categories qualitatively. We base our analysis, in part, on information provided through public comment, including comments by potentially affected land owners.

Thus, we solicit information that can be used to support such assessment, whether associated with the categories of impact highlighted in this report, or other economic effects of the critical habitat designation. Since the focus of this report is an assessment of incremental impacts of proposed critical habitat, we request information on the potential effects of the designation on current and future land uses, rather than on effects associated with the listing of the gnatcatcher, or of other Federal, state, or local requirements that influence land use.

EXECUTIVE SUMMARY

The purpose of this report is to identify and analyze the potential economic impacts that would result from the proposed critical habitat designation for the California gnatcatcher (*Poliophtila californica californica*). This report was initially prepared by Industrial Economics, Incorporated (IEc), under contract to the U.S. Fish and Wildlife Service's Division of Economics.

The U.S. Department of the Interior's Fish and Wildlife Service (FWS) proposed designation of critical habitat for the California gnatcatcher on February 7, 2000 (65 FR 5946). Section 4(b)(2) of the Endangered Species Act (ESA) requires FWS to base critical habitat proposals upon the best scientific and commercial data available, after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. FWS may exclude areas from critical habitat designation when the benefits of exclusion outweigh the benefits of including the areas within critical habitat, provided the exclusion will not result in extinction of the species.

FWS has proposed fifteen units of critical habitat for the gnatcatcher in the southern California counties of Los Angeles, Orange, San Bernardino, Riverside, and San Diego. The proposed units form an interconnected system of 799,916 acres of suitable and potential habitat for the species. Lands already believed to offer adequate protection and management for the gnatcatcher, such as lands addressed by approved Habitat Conservation Plans, may be excluded from critical habitat designation. Any existing significant structures within the critical habitat area, such as roads, buildings, and aqueducts, which do not contain the constituent elements necessary to support this species, are not considered critical habitat. Exhibit ES-1 displays how the nearly 800,000 acres of critical habitat for the gnatcatcher are distributed across Federal, state and local land management agencies, and private landholders.

Exhibit ES-1			
PROPOSED CRITICAL HABITAT ACREAGE BY MANAGER, HOLDER, OR OWNER			
Manager, Holder, or Owner of Proposed Critical Habitat	Total Acres	Percentage of Total	Unit #
Federal Government	128,322	16%	2,5,6
State/Local Government	37,513	5%	1,2,3,4,7,12
Private Entity	634,080	79%	1,3,4,7-15
TOTAL	799,916	100%	

Source: U.S. Fish and Wildlife Service, *Proposed Determination of Critical Habitat for the Coastal California Gnatcatcher*, February 7, 2000 (65 FR 5946).

This analysis defines an impact of critical habitat designation to include any effect critical habitat designation has above and beyond the impacts associated with the listing of the gnatcatcher. Section 9 of the ESA makes it illegal for any person to "take" a listed species, which is defined by the Act to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or the attempt to engage in any such conduct.¹ To evaluate the *increment* of economic impacts attributable to the critical habitat designation for the gnatcatcher, above and beyond the ESA listing, the analysis assumes a "without critical habitat" baseline and compares it to a "with critical habitat" scenario. The difference between the two is a measurement of the net change in economic activity that may result from the designation of critical habitat for the gnatcatcher.

The "without critical habitat" baseline represents current and expected economic activity under all existing modifications prior to critical habitat designation. These include the take restrictions that result from the ESA listing as well as other Federal, state, and local requirements that may limit economic activities in the regions containing the proposed critical habitat units. For example, the U.S. Army Corp of Engineers will still need to consult with FWS on wetland development projects that may affect a listed species to ensure the proposed activities do not jeopardize the continued existence of the species, regardless of the critical habitat status of the parcel. While there may be both current and future impacts attributable to the listing of the gnatcatcher, such impacts are not the subject of this analysis.

To estimate the incremental effect that critical habitat designation would have on existing and planned activities, IEc used the following approach:

- ! We first collected information on current and planned land uses in proposed critical habitat areas for the gnatcatcher;
- ! We then identified whether a Federal nexus to these activities exists; and
- ! Finally, we requested FWS opinion on: (1) whether each identified land use might be subject to modifications under the ESA listing for the gnatcatcher; and (2) whether additional modifications might be imposed under the critical habitat designation.²

¹ 15 U.S.C. 1531 et seq.

² To assess the incremental economic impacts of critical habitat designation for the gnatcatcher, IEc required policy direction from FWS on what potential project modifications would

FWS staff in Carlsbad, CA and Washington, DC discussed potential land management/use actions identified by IEC and determined that, for the gnatcatcher critical habitat designation, it is highly unlikely that any action would result in an adverse modification determination without an accompanying jeopardy opinion. In other words, critical habitat designation for the gnatcatcher is expected to result in no further modifications to proposed and existing activities *above and beyond modifications that already exist under the ESA listing* of the gnatcatcher.

Although critical habitat designation is not expected to require any further project modifications beyond those required by the listing of the gnatcatcher, government and private landowners may nonetheless incur *direct* costs resulting from critical habitat designation above and beyond those attributable to the listing of the gnatcatcher as a threatened species. These costs include: (1) the value of time spent in conducting section 7 consultations beyond those associated with the listing of the gnatcatcher, and (2) delays in implementing public and private development activities, which may result in losses to individuals and society.

FWS has recognized that there are approximately three different scenarios associated with the designation of critical habitat that could trigger additional consultation costs: (1) some consultations that have already been “completed” may need to be reinitiated to address critical habitat; (2) consultations taking place after critical habitat designation may take longer because critical habitat issues will need to be addressed; and (3) critical habitat designation may result in some new consultations taking place that otherwise would not had critical habitat not been designated. This would most likely occur on areas that are not occupied by the species. For the gnatcatcher, however, only occupied areas are proposed for designation as critical habitat. Exhibit ES-2 summarizes the potential direct impacts of critical habitat designation for the gnatcatcher on Federal, state, county and private land uses and activities. These costs are explored in greater detail in Section 4.

be imposed as a result of critical habitat designation over and above those associated with the listing. It is important to note here that it would not be appropriate for IEC to make such a policy determination. IEC requested that FWS consider what land management/use within the proposed critical habitat designation for the gnatcatcher might result in a determination of adverse modification (critical habitat effects) without an accompanying jeopardy opinion (listing effects). Identifying these land management/use actions provides IEC with a basis for evaluating the incremental economic impacts due to critical habitat designation for the gnatcatcher.

<p align="center">Exhibit ES-2</p> <p align="center">SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION FOR THE CALIFORNIA GNATCATCHER</p>						
Manager, Holder, or Owner of Land	Description of Current and Planned Land Uses or Activities That May Impact Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Project Modifications Under the ESA Listing?*	Additional Project Modifications Under Critical Habitat Designation?*	Estimated Impacts From Critical Habitat Designation Only?
U.S. Dept. of Defense (USMC, Camp Pendleton and MCAS-Miramar; U.S. Navy, Fallbrook Naval Weapons Station)	Military training exercises; military road/facility construction; utility easement	2,5,6	Potential habitat destruction	Possibly	No	Potential reinitiated consultations; project delays
State/Local Water Authorities	Current and planned facilities management	1,2,3,4,7,12	Regular clearing of vegetation, other management activities	Possibly	No	Potential reinitiated consultation; project delays
Private	Current and planned land development; Planned conservation acquisition	All units except 2,5, and 6	Potential habitat destruction; Section 404 permits; FEMA funding	Possibly	No	Potential reinitiated consultations; project delays; Possible conservation benefit

*Possible modifications are based on guidance from FWS staff in Carlsbad, CA office.

Sources: Public comments received in response to the proposed critical habitat designation (April 2000); (2) public hearings held on the proposed critical habitat designation (April 2000); and (3) interviews of staff at FWS, Federal, state, and local land management agencies, as well as building association representatives and private landowners.

In addition, this analysis evaluates the possibility of *indirect* economic impacts due to the critical habitat designation. Specifically, the analysis considers whether the public's uncertainty about particular parcels being subject to the designation, and the perception that project modifications result from the critical habitat designation, could in turn lead to real reductions in property values and increased costs to landowners. Although originating in perceived changes, these are real economic effects of critical habitat designation. They may occur even in cases in which additional project modifications on land uses within critical habitat are unlikely to be imposed.

In addition, the designation of critical habitat may result in economic benefits. Resource preservation or enhancement, which is aided by designation of critical habitat, may constitute an increase in non-recreational values provided directly by the species and indirectly by its habitat. Categories of potential benefits for the gnatcatcher include enhancement of scenic beauty, biodiversity, ecosystems, and intrinsic (passive use) values.³

Due to a court order requiring rapid turnaround of this analysis, there was insufficient time to develop quantitative estimates of economic impact because economic data were not readily available. Rather, we describe qualitatively the significant categories of economic impact expected to be attributable to critical habitat designation. As such, we solicit information that can be used to support such an assessment, i.e., data describing the categories of impact highlighted in this report, or other incremental economic effects of the critical habitat designation.

Data on small businesses and communities were not obtainable for this analysis; however, as noted previously, FWS guidance suggests that critical habitat designation is not expected to impose additional modifications above and beyond the modifications that already exist under the ESA listing. Nonetheless, as indicated above, critical habitat designation may create costs for some small businesses or communities operating within the boundaries of the critical habitat area. These costs are associated with additional Section 7 consultations and losses resulting from delays in project implementation. In addition, any small businesses and communities within the gnatcatcher critical habitat area may incur indirect costs and property value losses associated with (1) mitigating uncertainty about whether their property constitutes critical habitat; and (2) the perception of additional modifications from critical habitat designation.

³ Intrinsic values, also referred to as passive use values, include categories of economic benefits such as existence value, i.e., knowledge of continued existence of a resource or species; and bequest value, i.e., preserving the resource or species for future generations.

Draft - May 23, 2000

INTRODUCTION

SECTION 1

The U.S. Department of the Interior's Fish and Wildlife Service (FWS) published a proposed rule to list the coastal California gnatcatcher (referred to as the "gnatcatcher" throughout this report) as threatened on March 30, 1993, under provisions of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531et seq.).⁴ Following a review of information and public comments received on the rule, FWS determined to list the gnatcatcher as a threatened species in California on March 27, 1995 (60 FR 15693). Taking into consideration incidents of vandalism against gnatcatcher habitat (coastal sage scrub), FWS also determined at the time of this listing that designation of critical habitat was not prudent on the basis of the "increased threat" criterion. Subsequent to the listing and in response to a ruling by the U.S. Court of Appeals for the Ninth Circuit, FWS also proposed designation of critical habitat in California for the species.

Following publication of the final listing rule, the Natural Resources Defense Council filed a lawsuit against the Secretary of the Interior which challenged the legitimacy of FWS's finding that critical habitat for the gnatcatcher was not prudent. In May 1997, the U.S. Court of Appeals for the Ninth Circuit found that FWS's decision to invoke the not prudent exception with respect to designating critical habitat for the gnatcatcher was inconsistent with Congressional intent.⁵ In

⁴Multiple parties subsequently challenged the gnatcatcher listing on several grounds and the listing was briefly vacated by the U.S. District Court (May 1994), but in March 1995 FWS published a determination that retained threatened status for the gnatcatcher (60 FR 15693).

⁵The Court interpreted that Congress intended for the not prudent exception to critical habitat designation to apply "only in rare circumstances." Furthermore, the Court noted that FWS's conclusion that critical habitat would be less beneficial to the gnatcatcher than other types of protection (e.g., California's state conservation program) did not absolve FWS from the requirement

response, FWS reconsidered their evaluation of the prudency determination and published a prudency determination on February 8, 1999 (64 FR 5957). FWS published the proposed designation of critical habitat for the gnatcatcher on February 7, 2000 (65 FR 5946).

Critical habitat designation can help focus conservation activities for a listed species by identifying areas, both "occupied" and "unoccupied", that contain or could develop essential critical habitat features. The ESA defines occupied critical habitat as areas that contain the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. By contrast, the ESA defines unoccupied critical habitat as those areas that fall outside the geographical area occupied by the species, but that may meet the definition of critical habitat upon determination that they are essential for the conservation of the species. Unoccupied lands proposed as critical habitat frequently include areas inhabited by the species at some point in the past.

Consultation Under Section 7 of the Endangered Species Act

The designation of critical habitat directly affects only Federal actions. Section 7 (a) of the Act requires Federal agencies to ensure, in consultation with the FWS, that actions they fund, authorize, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the survival and recovery of the species. Individuals, organizations, States, local and Tribal governments, and other non-Federal entities are only affected by the designation of critical habitat if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding. Thus, activities on Federal lands that may affect the gnatcatcher or its critical habitat, if designated, will require section 7 consultation. Actions on private or State lands receiving funding or requiring a permit from a Federal agency also will be subject to the section 7 consultation process if the action may affect critical habitat. Federal actions not affecting the species or its critical habitat, as well as actions on non-Federal lands that are not federally funded or permitted, will not require section 7 consultation.

Informal section 7 consultation is designed to assist the Federal agency and any applicant in identifying and resolving potential conflicts at an early stage in the planning process. It consists of informal discussions between FWS and the agency concerning an action that may adversely affect a listed species or its' designated critical habitat. During the informal consultation, FWS makes advisory recommendations, if appropriate, on ways to minimize or avoid adverse effects. If agreement can be reached, FWS will concur in writing that the action, as revised, is not likely to adversely affect listed species or critical habitat.

A formal consultation is required if the proposed action may adversely affect listed species or designated critical habitat in ways that cannot be avoided through informal consultation. Formal

to designate critical habitat.

consultations determine whether a proposed agency action is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. The ESA implementing regulations define jeopardy as any action that would appreciably reduce the likelihood of both the survival and recovery of the species. Adverse modification of critical habitat is defined as any direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of the species. Determination of whether an activity will result in jeopardy to a species or adverse modification of its critical habitat is dependent on a number of variables, including type of project, size, location, and duration. If FWS finds, in their biological opinion, that a proposed agency action is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify the critical habitat, FWS may identify reasonable and prudent alternatives that are designed to avoid such adverse effects to the listed species or critical habitat.

Reasonable and prudent alternatives are defined at 50 CFR 402.2 as alternative actions that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that FWS believes would avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project.

Costs associated with implementing a reasonable and prudent alternative vary accordingly. FWS believes, however, that such costs would normally be associated with the listing of the gnatcatcher, as it is unlikely that FWS would conclude that an action would destroy or adversely modify critical habitat without also jeopardizing the continued existence of a listed species.

Federal agencies are also required to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its proposed or designated critical habitat. Regulations implementing this interagency cooperation provisions of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act and regulations at 50 CFR 402.10 require Federal agencies to confer with the FWS on any action that is likely to jeopardize the continued existence of a proposed species or to result in destruction or adverse modification of proposed critical habitat.

Purpose and Approach of Report

Under Section 4(b)(2) of the ESA, the Secretary of the Interior is required to designate critical habitat on the basis of the best scientific and commercial data available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. The Secretary may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat.

The purpose of this report is to identify and analyze the potential economic impacts that would result from the proposed critical habitat designation for the gnatcatcher. The analysis was

conducted by assessing how critical habitat designation for the gnatcatcher may affect current and planned land uses and activities on Federal (including military), state/local, and private land. For Federally managed land, designation of critical habitat may modify land uses, activities, and other actions that threaten to adversely modify habitat. For state, local, and private land subject to critical habitat designation, modifications to land uses and activities can only be required when a "Federal nexus" exists (i.e., the activities or land uses of concern involve Federal permits, Federal funding, or other Federal actions). Activities on state, local, and private land that do not involve a Federal nexus are not restricted by critical habitat designation.

In addition to determining whether a Federal nexus exists, the analysis must distinguish between economic impacts caused by the ESA listing of the gnatcatcher and those additional effects that would be caused by the proposed critical habitat designation. *The analysis only evaluates economic impacts resulting from additional modifications under the proposed critical habitat designation that are above and beyond impacts caused by existing modifications under the ESA listing of the gnatcatcher.* Finally, in the event that a land use or activity would be limited or prohibited by another existing statute, regulation, or policy, the economic impacts associated with those limitations or prohibitions would not be attributable to the designation of critical habitat.

To evaluate the increment of economic impacts attributable to the designation of critical habitat, above and beyond the ESA listing, the analysis assumes a "without critical habitat" baseline and compares it to a "with critical habitat" scenario, measuring the net change in economic activity. The "without critical habitat" baseline represents current and expected economic activity under all existing modifications prior to the designation of critical habitat. Only those actions that may be affected by modifications imposed by critical habitat designation, above and beyond existing modifications, are considered in this economic analysis. Moreover, actions must be "reasonably foreseeable," defined as projects which are currently authorized, permitted, or funded, or for which proposed plans are currently available to the public.

Structure of Report

The remainder of this report is organized as follows:

- !** **Section 2: Description of Species and Proposed Critical Habitat Areas** - Provides general information on the species and a brief description of proposed critical habitat areas.
- !** **Section 3: Framework for Analysis** - Describes the framework and methodology for the economic analysis; highlights sources of information for the report.

- ! **Section 4: Example Impacts Resulting from Critical Habitat Designation on Land Use: Federal, Local, and Private Land -** Identifies and assesses example cases of potential economic and other relevant impacts from the proposed critical habitat designation.

- ! **Section 5: Impacts Due to Uncertainty and Public Perception of Critical Habitat Designation -** Assesses the impacts that may result from public perception that critical habitat designation will impose additional modifications above and beyond those existing modifications under the ESA listing.

- ! **Section 6: Social and Community Impacts -** Identifies impacts to small entities and communities located within the proposed critical habitat.

- ! **Appendix A: Maps of Critical Habitat Areas: -** Provides maps of the proposed critical habitat units.

DESCRIPTION OF SPECIES AND PROPOSED CRITICAL HABITAT AREAS

SECTION 2

Description of Species and Habitat⁶

The coastal California gnatcatcher (*Poliophtila californica californica*) is a small, insectivorous, long-tailed bird which is a member of the old-world warbler and gnatcatcher family (Sylviidae). The gnatcatcher has dark blue-gray plumage above and grayish-white plumage below, and a tail which is mostly black above and below. Males have a distinctive black cap which is absent during the winter, and both sexes have a distinctive white eye-ring. The coastal California gnatcatcher is one of three subspecies of the California gnatcatcher, and is non-migratory.

The coastal California gnatcatcher's habitat is restricted to coastal southern California and the northwestern Baja California peninsula, Mexico, ranging from Ventura and San Bernardino Counties in California southward to El Rosario, Mexico. Analyses of the historical range of the coastal California gnatcatcher indicate that a significant portion (65 to 70 percent) of its range may have been located in southern California rather than Baja California, Mexico. The species generally occurs below 3,000 feet in elevation. Gnatcatcher nests are composed of grasses, bark, small leaves, spider webs, down, and other materials and are often located in California sagebrush about three feet above the ground.

Though considered locally abundant in the mid-1940s, by the 1960s the gnatcatcher population had experienced a significant decline throughout its range due to widespread destruction of its habitat. By the early 1980s, the U.S. population was estimated at no more than 1,000 to 1,500 pairs. Remaining gnatcatcher habitat consists of highly fragmented remnants that generally are bordered on at least one side by encroaching urban development. In March 1993, the species was

⁶ The information on the gnatcatcher and its habitat included in this section was obtained from: (1) *Proposed Determination of Critical Habitat for the Coastal California Gnatcatcher*, February 7, 2000 (50 CFR Part 17); and (2) Alden et al. 1998. National Audubon Society Field Guide To California. Chanticleer Press, Inc.: New York.

listed as threatened due to habitat loss and fragmentation attributable to development and the effects of nest parasitism by the brown-headed cowbird.

Typical habitat for the coastal California gnatcatcher includes areas in or near sage scrub habitat, a broad classification of vegetation that comprises various dominant plant communities such as: Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean coastal sage scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage chaparral scrub. Sage scrub, which often occurs in a patchy or mosaic distribution pattern throughout the range of the gnatcatcher, consists of low-growing, drought-deciduous shrubs and sub-shrubs such as California sagebrush, buckwheats, encelias, and various sages. Gnatcatchers also use chaparral, grassland, and riparian habitats (where these habitats occur in proximity to sage scrub) for dispersal and foraging. These non-sage scrub areas may be essential gnatcatcher habitat during certain times of the year, especially during drought conditions.

FWS biologists have determined that the primary constituent elements of critical habitat for the gnatcatcher are found in undeveloped areas (including agricultural lands) that support various types of sage scrub, as well as chaparral, grassland, or riparian habitats proximate to sage scrub that may be utilized for key biological needs including foraging and breeding. Undeveloped areas that meet dispersal needs by providing connectivity between or within larger core areas are also included. These undeveloped areas may be disturbed, contain introduced species, and may receive only periodic use by the gnatcatcher, but are viewed as providing important linkages between core population areas.

Background on Proposed Critical Habitat Units

FWS has proposed fifteen separate units in southern California for designation as gnatcatcher critical habitat. FWS evaluated several criteria in designing proposed critical habitat units. These criteria included: (1) gnatcatcher occurrences; (2) presence of sage scrub vegetation and other plant communities; (3) elevation; and (4) connectivity to other gnatcatcher populations.

In proposing critical habitat for the gnatcatcher, FWS also evaluated lands where on-going conservation efforts are taking place under approved Habitat Conservation Plans (HCPs) (e.g. San Diego MSCP, Central-Coastal NCCP). Under these plans, non-Federal landowners establish measures intended to protect and manage for the conservation of the gnatcatcher within broad geographic areas. After FWS approves such a plan (on the basis of its consistency with the purposes of the ESA), some incidental take of the species is allowed.⁷ In determining proposed critical habitat,

⁷Incidental take permits are issued for approved HCPs under Section 10 (a)(1)(B) of the ESA. Under special rule pursuant to section 4(d), similar permits for incidental take of gnatcatchers are issued to NCCPs (58 FR 63088).

FWS also considered biological analyses conducted for the following conservation plans: the Western Riverside County Multiple Species HCP, the Rancho Palos Verdes Multiple Species HCP, the North San Diego County Multiple HCP, the North County Subarea of the Multiple Species HCP for Unincorporated San Diego County, and the Southern Subregion of Orange County's Natural Community Conservation Plan NCCP). Currently, FWS is proposing that non-Federal lands that are located within the boundaries of an existing approved HCP or NCCP and are covered by an operative incidental take permit be excluded from designated critical habitat for the gnatcatcher. FWS seeks further comment from the public on the appropriateness of this approach, as well as other alternatives that propose to exclude HCP and NCCP lands (or some portion thereof) from critical habitat.

FWS did not map critical habitat in sufficient detail to exclude developed areas (towns, housing developments, roads, aqueducts) which are unlikely to contain the constituent elements necessary to conserve this species. Only those lands located within the critical habitat boundaries which contain one or more of the constituent elements are proposed for critical habitat.

Exhibit 2-1 displays all fifteen units proposed as critical habitat for the gnatcatcher; more detailed maps of each unit are provided in Appendix A. As shown, the fifteen units are located across a broad geographical expanse, ranging from central Los Angeles County south and east through San Bernardino, Riverside, Orange, and San Diego Counties. The units form a series of corridors that allow for foraging and dispersal movement of the gnatcatcher. Ranging from 5,776 acres to 264,167 acres per unit, all fifteen units of proposed critical habitat together equal nearly 800,000 acres. These areas consist of land owned or managed by:

- ! U. S. Department of Agriculture
- Forest Service
- ! U. S. Department of the Interior
- Fish and Wildlife Service
- Bureau of Reclamation
- ! U. S. Department of Defense
- U. S. Marine Corps
- U. S. Navy
- U.S. Air Force
- ! State of California
- ! Counties of Los Angeles, Riverside, Orange, San Bernardino, and San Diego
- ! Various Local Municipalities
- ! Private Entities

Draft - May 23, 2000

Exhibit 2-1

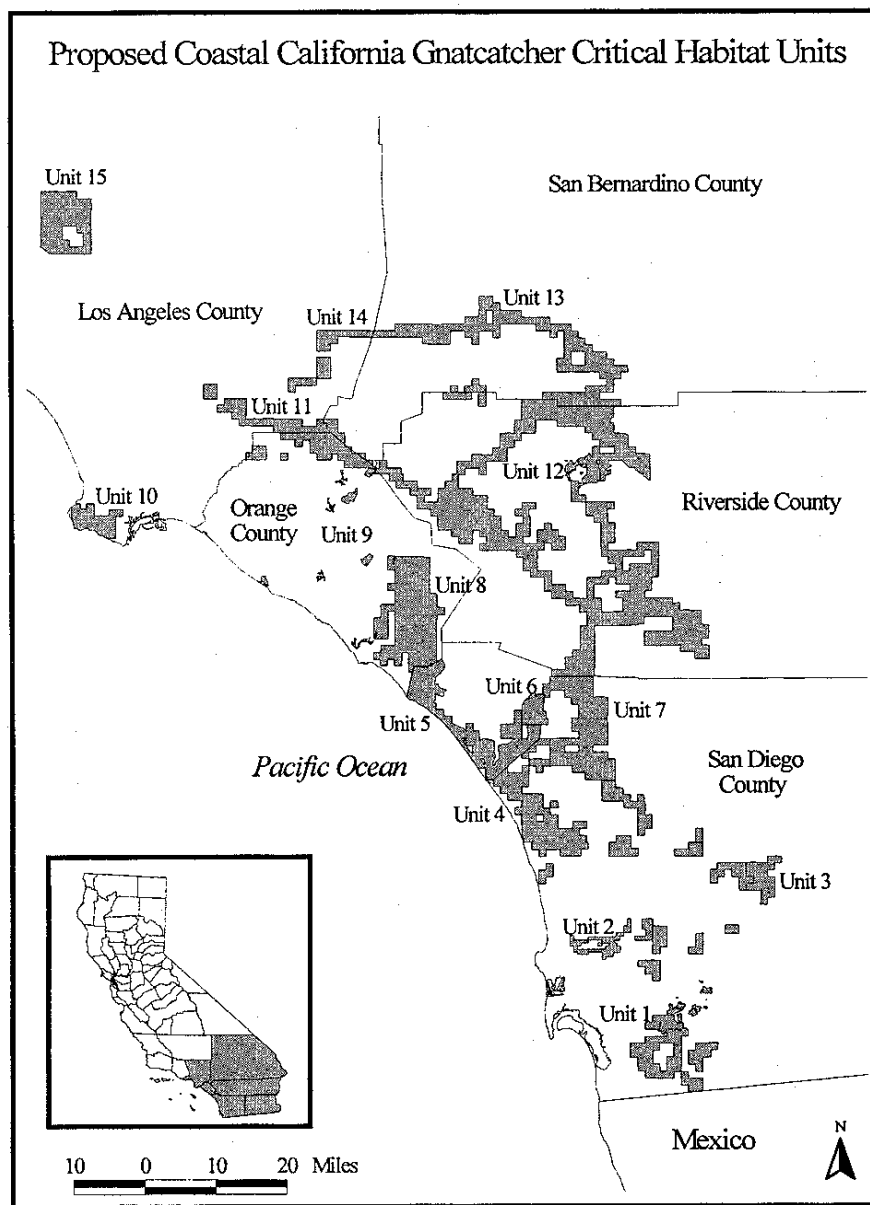


Exhibit 2-2 displays acreage associated with Federal, state/local or private lands.

Exhibit 2-2			
PROPOSED CRITICAL HABITAT ACREAGE BY MANAGER, HOLDER, OR OWNER			
Manager, Holder, or Owner of Proposed Critical Habitat	Total Acres	Percentage of Total	Unit #
Federal Government	128,322	16%	2,5,6
Local or State Government	37,513	5%	1,2,3, 4,7,12
Private Entity	634,080	79%	1,3,4, 7-15
TOTAL	799,916	100%	
Source: U.S. Fish and Wildlife Service, <i>Proposed Determination of Critical Habitat for the Coastal California Gnatcatcher</i> , February 7, 2000 (64 FR 5957).			

Below, we describe these lands included in proposed critical habitat in detail, according to each unit of designated critical habitat.

Unit 1: San Diego Multiple Species Conservation Program (MSCP)

Unit 1 encompasses 51,141 acres within the San Diego MSCP planning area. This unit consists of lands containing core gnatcatcher populations, sage scrub and areas providing connectivity between core populations and sage scrub. Lands within the MSCP planning area that are not within an approved subarea plan and have not received incidental take permits are included in the proposed critical habitat. These include lands within the cities of Chula Vista, El Cajon, and Santee; the San Diego County Subarea Plan; the Otoy-Sweetwater Unit of the San Diego National Wildlife Refuge Complex; water district lands owned by Sweetwater Authority, the Helix and Otoy Water Districts.

Unit 2: Marine Corps Air Station, Miramar

This unit comprises approximately 12,007 acres on Marine Corps Air Station, Miramar. Unit 2 features lands identified as occupied by core gnatcatcher populations in the Station's proposed Integrated Natural Resource Management Plan. Other proposed lands include canyons and corridors that serve to provide east-west and north-south connectivity to defined preserve lands adjacent to this unit.

Unit 3: Multiple Habitat Conservation Open Space Program for San Diego County

Unit 3 consists of 14,860 acres of lands; these contain a core population of gnatcatchers on the Cleveland National Forest south of State Route 78 near the upper reaches of the San Diego River. This unit also includes corridors of sage scrub for purposes of connectivity.

Unit 4: North San Diego County Multiple Habitat Conservation Plan (MHCP)

Unit 4 totals 70,526 acres within the MHCP planning area in northwestern San Diego County. Proposed lands contain core gnatcatcher populations and sage scrub identified by the San Diego Association of Governments (SANDAG) as high or moderate in value as habitat, based on a recent evaluation of gnatcatcher habitat. Lands within this unit also provide connectivity between core populations of gnatcatchers within adjacent units.

Unit 5: Marine Corps Base Camp Pendleton

Lands in Unit 5 contain a significant coastal corridor of gnatcatcher-occupied sage scrub that provides the primary linkage between San Diego core populations and those in southern Orange County (Unit 8). Unit 5 features approximately 50,935 acres located on Marine Corps Base, Camp Pendleton. Lands proposed overlay with 26 training areas and portions of an additional nine training areas.

A second corridor of gnatcatcher-occupied sage scrub occurs in this unit, along the Santa Margarita River valley that branches inland and connects with habitat in the Fallbrook Naval Weapons Station (Unit 6) and further north into southwestern Riverside County (Unit 12).

Unit 6: Fallbrook Naval Weapons Station

Unit 6 comprises 8,909 acres of lands located on Fallbrook Naval Weapons Station in northern San Diego County. This unit provides a significant segment of a corridor of sage scrub between core gnatcatcher populations on Camp Pendleton (Unit 5) and populations in southwestern Riverside County (Unit 12).

Unit 7: North County Subarea of the Multiple Species Conservation Plan for Unincorporated San Diego County

Lands in Unit 7 constitute the primary linkage between San Diego populations and those in southwestern Riverside County (Unit 12). This unit contains approximately 67,446 acres with the

planning area for the North County Subarea of the San Diego County Multiple Species Conservation Plan. As well as providing connectivity between areas, proposed critical habitat in this unit contains several core gnatcatcher populations and sage scrub identified as high or moderate in value.

Unit 8: Southern Natural Community Conservation Plan (NCCP) Subregion of Orange County

Significant core populations of gnatcatchers exist in Unit 8. This unit has 68,763 acres within the planning area for the Southern NCCP Subregion of Orange County; it provides the primary linkage between core populations on Camp Pendleton in Unit 5 with populations to the north in Orange County (Unit 9).

Unit 9: Central/Coastal Natural Community Conservation Plan Subregion of Orange County (Central/Coastal NCCP)

Consisting of approximately 5,776 acres located with the Orange County Central/Coastal subregion NCCP planning area, Unit 9 is the smallest of all the proposed critical habitat units. This unit possesses lands containing core populations and sage scrub habitat considered essential for the conservation and recovery of the gnatcatcher within select Existing-Use Areas, the western portion of the North Ranch Policy Plan Area (i.e., west of State Route 241), and the panhandle portion of Marine Corps Air Station El Toro.

Unit 10: Palos Verdes Peninsula Subregion, Los Angeles County

Unit 10 consists of 13,808 acres within the NCCP subregional planning area for the Palos Verdes Peninsula in Los Angeles County. This unit includes the City of Rancho Palos Verdes Multiple Species Habitat Conservation Plan, and supports core gnatcatcher populations and sage scrub habitat.

Unit 11: East Los Angeles County-Matrix Natural Community Conservation Plan Subregion of Orange County

Unit 11 contains 54,682 acres within the Montebello, Chino-Puente Hills, East Coyote Hills, and West Coyote Hills areas in East Los Angeles. This unit provides connectivity between core gnatcatcher populations with the Orange County Central/Coastal Subregion NCCP (Unit 9), the Western Riverside County Multiple Species Habitat Conservation Plan (Unit 12), and the Bonelli Regional Park core population within the North Los Angeles linkage (Unit 14).

Unit 12: Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

At 264,167 acres, Unit 12 is the largest of the fifteen proposed critical habitat units, and is wholly located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation proposed planning area. Numerous core populations reside in this unit, in the Temecula/Murietta/Lake Skinner region and the Lake Elsinore/Lake Mathews region. Additional elements within Unit 12 include regions of connectivity and other core populations along the I-15 corridor, the Lake Perris area, the Alessandro Heights area, the Box Spring Mountains/The Badlands, and areas skirting the foothills of the Santa Ana Mountains into the Chino-Puente Hills. This unit serves as a major source of connectivity between core populations in Riverside County and populations in San Diego, San Bernardino, Orange, and Los Angeles Counties. Some areas in this unit overlap with Core Reserves established under the Habitat Conservation Plan for the Stephen's Kangaroo Rat.

Unit 13: San Bernardino Valley Multiple Species Habitat Conservation Plan, San Bernardino County

Unit 13 contains 74,316 acres of lands located along the foothills of the San Gabriel Mountains and bordered by the Jurupa Hills on the border of San Bernardino and Riverside Counties. This unit, which provides linkages between western Riverside County (Unit 12) and eastern Los Angeles County (Unit 11), includes lands within the San Bernardino National Forest and Norton Air Force Base.

Unit 14: East Los Angeles County Linkage

Unit 14 consists of 8,361 acres located along the foothills of the San Gabriel Mountains in eastern Los Angeles. The main purpose and function of this unit is in establishing east-west connectivity of sage scrub habitat between core populations in San Bernardino County (Unit 13) and those in southeastern Los Angeles County (Unit 11).

Unit 15: Western Los Angeles County

The 34,339 acres of Unit 15, located in western Los Angeles County along the foothills of the San Gabriel Mountains, represent the northernmost extreme of the gnatcatcher's current range. This unit contains breeding populations and sage scrub habitat in the Placerita, Box Springs Canyon, and Plum Canyon areas.

Note that Units 14 and 15 are the only two areas of the proposed critical habitat areas that do not overlap with existing or planned regional habitat conservation plans. Thus, if FWS chooses

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an alternative proposal based on excluding HCP and NCCP lands from designated critical habitat, most of the lands within these units would still be designated as critical habitat.

FRAMEWORK FOR ANALYSIS

SECTION 3

This section provides an overview of the framework for analysis, including a description of the methodology used to determine potential economic impacts from the proposed designation of critical habitat for the gnatcatcher. It also describes the primary sources of information used to develop this report.

Framework for Analysis

This economic analysis examines the impacts of restricting specific land uses or activities within areas designated as critical habitat. The analysis evaluates impacts in a "with" critical habitat designation versus a "without" critical habitat designation framework, measuring the net change in economic activity. The "without" critical habitat designation scenario, which represents the baseline for analysis, includes all protection already accorded to the gnatcatcher under state and Federal laws, such as the Fish and Wildlife Coordination Act, the National Environmental Policy Act, the Clean Water Act, and the California Environmental Quality Act. The ESA listing added additional protection in its listing provisions. The focus of this economic analysis is to determine the impacts of land use modifications and activities from the critical habitat designation that are above and beyond the impacts due to existing modifications under Federal, state, and local laws.

Steps to Identify Potential Impacts from Critical Habitat Designation

Listed below are the four questions that were posed to identify economic impacts from the proposed critical habitat designation.

- 1. What land uses and activities within the proposed critical habitat designation may be affected?** As noted above, potential impacts were identified by reviewing public comments, public hearings, and through phone conversations with FWS staff, Federal, state, and local land management agencies, building associations, and private landowners. In addition to

considering direct impacts on designated lands, the analysis considers the potential for indirect impacts that may affect these lands (see Question 4).

2. **Does the land use or activity involve a "Federal nexus"?** Critical habitat designation can only affect land uses and activities on state, county, and private land when a "Federal nexus" exists (i.e., the activities or land uses of concern involve Federal permits, Federal funding, or other Federal actions). Activities on state, county, and private land that do not involve a Federal nexus are not affected by critical habitat designation. Therefore, they are not included in this economic analysis. For federally- managed land, designation of critical habitat may restrict land uses, activities, and other actions that may adversely modify habitat.
3. **Would the land use or activity face *additional* modifications or costs under the proposed critical habitat designation, above and beyond existing modifications or costs under the ESA listing of the gnatcatcher?** As noted above, the baseline for analysis includes all modifications to land use existing prior to the designation of critical habitat, including listing modifications. Only impacts from modifications above and beyond this baseline are considered. Determinations of whether a land use or activity would face additional modifications or costs under the proposed critical habitat designation are based on discussions with FWS. Those land uses and activities that would be subject to additional modifications under the proposed critical habitat designation are evaluated to determine the potential national economic efficiency effects and regional economic impacts. While FWS anticipates recommending no further modifications to land use activities above those that may be required as a result of the listing of the gnatcatcher, it is possible that some land owners could incur additional costs resulting from reinitiating consultations with FWS.
4. **Would the land use or activity be subject to other indirect effects under the proposed critical habitat designation, based on perceptions of potential modifications rather than actual modifications on planned activity?** FWS has determined that the designation of critical habitat requires no further modifications to land uses and activities above and beyond those modifications extant under the ESA listing. Although actual modifications may be identical for lands within the boundaries of critical habitat and lands outside designated critical habitat, landowners and land managers may perceive or expect that additional modifications will arise from the delineation of critical habitat boundaries. In addition, landowners and managers with property within critical habitat boundaries may be uncertain about whether their property constitutes critical habitat. These perceptions may result in losses in economic

value and may cause increased costs to property owners to mitigate these losses during the period following critical habitat designation, before markets incorporate information regarding actual required modifications to activities. For example, the value of property within the extant boundary of the critical habitat designation may be lower (or higher) than properties outside the boundaries of the designation.

National and Regional Economic Effects

The economic effects of designation of critical habitat consist of those factors affecting national income (i.e., national economic efficiency effects) and those economic and social impacts that are important on a local or regional level (i.e., regional economic impacts).

- ! **National economic efficiency effects** are those consequences of critical habitat designation that represent a change in national income. Efficiency effects include, among other things, recreation (consumer surplus) values as well as management and construction costs in an area that would not be required without critical habitat designation. Impacts on national income may be positive (benefits) or negative (costs). For example, if road construction is prohibited in an area to avoid adverse modification, primitive recreation may be preserved in the area (a benefit) while development of motorized recreation is precluded (a cost).

- ! **Regional economic effects** (or distributional effects) relate to equity and fairness considerations associated primarily with how income and wealth are divided among regions and groups. These effects are represented by changes in regional employment, household income, or state/local tax revenue that may have offsetting effects elsewhere in the economy. For example, if the designation of critical habitat results in less construction and development activity within critical habitat areas, this activity may increase in other nearby areas suitable for development. While this may have important economic impacts on different local economies, it may have little or no effect on the regional or national economy.

Benefits of Critical Habitat Designation

The designation of critical habitat may also result in economic benefits by aiding the preservation or enhancement of non-recreational values provided directly by the species and indirectly by its habitat. Categories of potential benefits for the gnatcatcher include enhanced scenic beauty, biodiversity, ecosystem, and intrinsic (passive use) values. These benefits may result because society, species, and ecosystems are spared adverse and irreversible effects of habitat loss and species

extinction. Quantitative or monetary values for these potential benefits of critical habitat designation, however, have not been estimated.

Information Sources

Various sources contributed to the development of this report, providing such information as the ownership patterns and management of lands within the proposed critical habitat designation, potentially affected activities and land uses, and economic impacts. The primary sources of information for this report fall into the following categories:

- ! **Public Comments:** Public comments received in response to the proposed critical habitat designation for the gnatcatcher provided valuable information on potentially affected land uses and activities, as well as possible economic impacts.
- ! **Personal Communications:** FWS personnel were a primary source of information, as well as Federal, state, county, and local agency staff involved in the management of land within the proposed critical habitat designation were contacted by phone to identify potentially affected current and planned activities and land uses and to provide data on possible economic impacts. In addition to Federal and county/local staff, private landowners were contacted, including developers and counsel representing landowners. Phone interviews were conducted in April 2000.
- ! **Public Hearings:** As part of the public comment period for the proposed critical habitat designation, public hearings were held in Anaheim, San Diego, and Riverside, CA in February 2000. Transcriptions of the hearings were reviewed to identify possible impacts from the proposed critical habitat designation.
- ! **Maps:** FWS provided maps for each of the fifteen units of proposed critical habitat.

**EXAMPLE IMPACTS OF CRITICAL HABITAT ON LAND USE:
FEDERAL, PUBLIC, AND PRIVATE LANDS**

SECTION 4

The proposed designation of critical habitat for the gnatcatcher includes Federal, state, local jurisdictions, and private lands. Critical habitat designation may modify land uses, activities, and other actions on federally managed land that threaten to adversely modify habitat. In order for activities and land uses on state, county, and private lands to be affected by critical habitat designation, a Federal nexus must exist (i.e., the activities or land uses involve a Federal permit, Federal funding, or require Federal actions). Activities on state, local, and private lands that do not involve a Federal nexus are not restricted by the designation of critical habitat.

In this section, we first discuss the types of impacts that theoretically could be incurred by Federal, state, local, and private land owners and managers as a result of the critical habitat designation for the gnatcatcher. Second, we discuss actual activities in which these entities are involved, and evaluate whether they are likely to experience these impacts. Due to the significant number of individual landowners and land uses found within the boundaries of proposed critical habitat for the gnatcatcher, we describe select examples of land uses that may be affected by designated critical habitat rather than provide a description of individual land uses. Based on the public comments and public hearings, we believe these example cases typify the range of potential impacts on current and planned land uses and activities resulting from the designation of proposed critical habitat for the gnatcatcher.

POTENTIAL IMPACTS OF CRITICAL HABITAT DESIGNATION

As noted above, FWS staff have determined that, for the gnatcatcher critical habitat designation, there is no action that would result in an adverse modification determination without an accompanying jeopardy determination. In other words, critical habitat designation for the gnatcatcher does not modify land uses and activities *above and beyond modifications that already exist under the ESA listing* of the gnatcatcher. However, governments and private landowners may nonetheless incur direct costs resulting from the designation that are not attributable to the listing of the gnatcatcher as a threatened species. These costs include:

- ! The value of time spent in conducting Section 7 consultations beyond those associated with the listing of the gnatcatcher; and
- ! Delays in implementing public and private development activities, which may result in losses to individuals and society.

Note that this analysis of economic impacts recognizes a possible distinction between occupied and unoccupied lands within critical habitat. FWS expects that any potential economic impacts from the critical habitat designation incremental to the listing will occur almost exclusively on *unoccupied* lands. The reasoning to support this view is that occupied lands contain physical features essential to the survival and recovery of the species, therefore any economic impacts affecting these lands are attributable to the listing of the species rather than to critical habitat due to the ESA's restriction on "taking" listed species. In contrast, unoccupied habitat within critical habitat designation may not have received similar protection under the listing as occupied habitat had critical habitat not been designated. Thus, only costs associated with consultations triggered by activities on unoccupied lands can be attributed to the critical habitat designation. This would most likely occur on areas that are not occupied by the species. For the gnatcatcher, however, only occupied areas are proposed for designation as critical habitat.

This analysis, however, also recognizes an alternative view expressed by some land owners. That is, ongoing or planned activities on occupied lands may trigger re-initiations of previous consultations conducted under the listing, or in select cases, new consultations that would not have taken place under the listing. While it is certainly more plausible that new consultations will be associated with activities on unoccupied lands, this analysis considers the possibility that some new consultations may be triggered by activities on occupied lands.

Costs Associated with Conducting Section 7 Consultations on Critical Habitat

Parties involved in Section 7 consultations include FWS and the Federal agency involved in the proposed activity. In cases where the consultation involves an activity proposed by a state or local government or a private entity (the "applicant"), the Federal agency with the nexus to the activity serves as the liaison with FWS.

To initiate a formal consultation, the relevant Federal agency submits to FWS a consultation request with an accompanying biological analysis of the effects of the proposed activity. This biological analysis may be prepared by the relevant Federal agency, the state, county, or municipal entity whose action requires a consultation, or an outside party hired by the agency or landowner. Once FWS determines that these documents contain sufficient detail to enable FWS assessment, FWS has 135 days to consult with the relevant Federal agency and render its biological opinion. During

the consultation, parties discuss the extent of the impacts on critical habitat and propose potential mitigation strategies, if appropriate.⁸

Generally, FWS has recognized that there are three different scenarios associated with the designation of critical habitat that could trigger additional consultation costs: (1) some consultations that have already been “completed” may need to be reinitiated to address critical habitat; (2) consultations taking place after critical habitat designation may take longer because critical habitat issues will need to be addressed; and (3) critical habitat designation may result in some new consultations taking place that otherwise would not had critical habitat not been designated.

Cost Associated with Project Delays from Section 7 Consultations on Critical Habitat

Both public and private entities may experience delays in projects and other activities due to critical habitat designation. Regardless of funding (i.e., private or public), projects and activities are generally undertaken only when the benefits exceed the costs, given an expected project schedule. If costs increase, benefits decrease, or the schedule is delayed, a project or activity may no longer have positive benefits, or it may be less attractive to the entity funding the project. For example, if a private entity undertaking a residential development must delay groundbreaking as result of an unresolved Section 7 consultation attributable to the designation of critical habitat, the developer may incur additional financing costs. Delays in public projects, such as construction of a new park, may impose costs in the form of lost recreational opportunities. The magnitude of these costs of delay will depend on the specific attributes of the project, and the seriousness of the delay. However, it is likely any such delays will be attributable to the effects of listing of the species and not the designation of critical habitat.⁹

⁸ Many applicants incur costs to prepare analyses as part of the consultation package. These costs vary greatly depending on the specifics of the project. In most cases these costs are attributable to the fact that a species has been added to the list of threatened and endangered species rather than the designation of critical habitat.

⁹ Developers are aware of the potential impact of critical habitat designation on project scheduling. For example, one representative of a developers' association in Northern California indicated that, "Our builders do everything they can to comply with the Endangered Species Act. However,...the amount of additional paperwork [associated with the impact of ESA requirements], in many cases, stops or delays a project. (See San Francisco Examiner article by Jane Kay, "Feds may designate whipsnake habitat", March 9, 2000.)

IMPACTS OF CRITICAL HABITAT ON FEDERAL LAND

The areas proposed for designation as critical habitat for the gnatcatcher include property held or managed by the following Federal agencies:

- ! U. S. Department of Agriculture
 - Forest Service
- ! U. S. Department of the Interior
 - Bureau of Reclamation
 - Fish and Wildlife Service
- ! U.S. Department of Defense
 - U.S. Marine Corps
 - U.S. Navy
 - U.S. Air Force

Of the total acres of proposed critical habitat, 16 percent (128,322 acres) is held or managed by Federal agencies.

Section 7 of the ESA requires formal consultation with the FWS for all Federal actions that may adversely affect listed species or the designated critical habitat. Current and planned land uses and activities on Federal land that may be affected by designation of critical habitat were identified by reviewing public comments submitted by Federal agencies and through phone communication with Federal agency staff. According to guidance from FWS staff, critical habitat designation will place no additional modifications on any of the identified Federal land uses and activities above and beyond modifications that already exist under the ESA listing of the gnatcatcher since all areas proposed are considered occupied. Nonetheless, Federal agencies remain concerned about the possible impacts of critical habitat designation. Below we describe current and planned land uses and activities, possible Federal nexuses, and concerns over impacts for each Federal agency with land located in the proposed critical habitat.

U.S. Department of Defense, United States Marine Corps

Lands located on Marine Corps Air Station, Miramar (MCAS Miramar) and United States Marine Corps Base, Camp Pendleton (Camp Pendleton) define the whole of Units 2 and 5, respectively. Proposed critical habitat for the gnatcatcher on Miramar equals approximately 12,000 acres; critical habitat lands on Camp Pendleton equal over 50,000 acres.

Exhibit 4-1 shows current and proposed land uses on Camp Pendleton based on information obtained from written comments submitted by USMC and from phone conversations with FWS staff.

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FWS guidance suggests that Camp Pendleton and MCAS Miramar lands will face no modifications from critical habitat designation above and beyond existing modifications under the ESA listing of the gnatcatcher. Land uses and activities at both of these Marine Corps installations and possible modifications are described in more detail below.

Exhibit 4-1 FEDERAL LANDS (U.S. MARINE CORPS): SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION FOR THE GNATCATCHER					
Description of Current and Planned Land Uses or Activities That May Impact Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?*	Additional Modifications Under Critical Habitat Designation?*	Estimated Impacts From Critical Habitat Designation Only?
Military training and construction (Camp Pendleton and MCAS Miramar)	2,5	Potential habitat destruction	Possibly	No	reinitiated consultations
*Possible modifications are based on guidance from FWS staff in Carlsbad, CA office. Sources: (1) Doug Krofta, Biologist, FWS, personal communication, April 24, 2000; (2) Public comments provided by USMC in response to proposed designation of critical habitat for the gnatcatcher, April 7, 2000.					

Unit 5 of proposed critical habitat is identified as Marine Corps Base Camp Pendleton, which is one of two primary Marine Corps bases in the United States.¹⁰ Camp Pendleton hosts the 1st Marine Division and 1st Force Service Support Group, which consist of infantry, artillery, combat

¹⁰The other primary training base used by the Marine Corps is Camp Lejuene in North Carolina.

engineer, amphibious vehicle and combat service troop units. These troops train at Camp Pendleton and deploy regularly to the western Pacific, southwest Asia, and other areas. This base also hosts various military schools, including the School of Infantry for training newly enlisted Marines, the Field Medical Service School, and the Weapons and Field Training Battalion.

MCAS Miramar is the Marine Corps' installation that comprises all of Unit 2 of the proposed critical habitat for the gnatcatcher. MCAS Miramar is the largest Marine Corps Air Station in the western United States, and hosts the Commander headquarters, Marine Corps Air Bases Western Area, and the 3rd Marine Aircraft Wing (3d MAW). 3d MAW's mission is to provide expeditionary aviation forces capable of short-notice, worldwide deployment. Miramar also hosts a large reserve aviation group. In addition to flight operations, troops at Miramar engage in extensive ground training designed to ensure proficiency in expeditionary operations and basic warfighting skills. Typical training activities that take place at both bases include: combat engineering; field communications; nuclear, biological, and chemical defense; basic combat skills; marksmanship; land navigation; vehicle operations; and other military activities.

On Camp Pendleton, proposed critical habitat for the gnatcatcher includes 26 areas used for training, as well as components of nine other training areas. For example, proposed critical habitat for the gnatcatcher includes two of three principal beach landing areas (Red and White Beaches), as well as areas inland of these beaches used for amphibious warfare training exercises, large and small unit tactics, and individual warfighting skills. In total, proposed critical habitat covers 45 percent of training lands at Camp Pendleton. At Miramar, proposed critical habitat overlaps with five ground training areas; the existing military pistol range and surface danger zone; military warehouse activities and planned warehouse development; the ammunition storage area; an ordnance assembly area; an explosive ordnance disposal training site; areas proposed for new military housing and marksmanship training; aircraft maintenance areas; and aircraft hangars.

Due to rapid urbanization and habitat fragmentation in San Diego County and throughout southern California, Camp Pendleton is one of few remaining open space areas in the region. Core populations of many threatened and endangered species, including the gnatcatcher, utilize Camp Pendleton's open spaces and natural habitats. At present, seventeen other federally listed species reside on the base.¹¹

Because of the presence of many listed species and habitats upon which they depend, the Marine Corps has developed programmatic-level multiple species management plans for their bases. These plans are designed to manage for the needs of multiple species and natural habitats, and the Marine Corps asserts that the plans provide adequate, program-level protection for species and

¹¹These and other data were provided in public comments submitted by the U.S. Marine Corps regarding proposed critical habitat for the gnatcatcher on Camp Pendleton and MCAS Miramar (April 7, 2000).

essential habitats. As such, public comments submitted by the Marine Corps reflect concerns that additional, more extensive consultations (or re-initiations of existing consultations) associated with the designation of critical habitat for the gnatcatcher may result in costs, with little or no additional benefit to the species. Cited examples of potential costs incurred include: increased construction costs, increased manpower costs, and costs of implementing alternatives to current training and land use regime. While we did not evaluate these issues in the timeframe available for this draft analysis, we believe the potential for costs associated with additional or re-initiated consultations associated with critical habitat merits further research.

U.S. Department of Defense, U.S. Naval Weapons Station Seal Beach, Detachment Fallbrook

Unit 6 of proposed critical habitat is composed of Naval Weapons Station Seal Beach, Detachment Fallbrook (Detachment Fallbrook). Detachment Fallbrook is 8,850 acres located in the southern foothills of the Santa Ana Mountains in northern San Diego County. It is immediately adjacent to the municipality of Fallbrook which is a relatively dense residential development along the eastern boundaries. Detachment Fallbrook shares its western and southern borders with Camp Pendleton. The Santa Margarita River forms the northern boundary, and the San Luis Rey River is nearby to the southeast. Along the eastern border lies mainly semi-rural agricultural land, including nurseries, avocado and citrus groves, vineyards, and the Fallbrook Airpark.

Detachment Fallbrook's mission is to provide logistical ammunition and technical weapons support to the U.S. Pacific Fleet, U.S. Marine Corps, and other customers. It serves as the primary ammunition supply point for amphibious warfare ships and Marine Corps training requirements on the West Coast and is the only West Coast Intermediate Level Maintenance activity for air-launched missiles. Vertical Replenishment (material movement by helicopter) capability makes Detachment Fallbrook the only viable location on the West Coast to transfer ammunition to and from specific classes of ships. Detachment Fallbrook's 200 magazines store over 11,500 tons of ordnance in order to meet mission requirements. In addition, Detachment Fallbrook conducts technical performance assessments of weapons and combat systems, product quality evaluations, and measurement evaluations. A work force of nearly 300 civilian and military personnel is employed at the base in support of these activities.

Proposed critical habitat includes several thousand acres of lands currently unoccupied by breeding pairs. In addition, based on Detachment Fallbrook's assessment, these areas do not contain the primary constituent elements. Most of these unoccupied areas consist of open spaces containing native grasses, with disjointed, relatively small isolated patches of coastal sage scrub. These open areas provide habitat for another ESA listed organism (Stephens' Kangaroo Rat) and are managed accordingly.

Detachment Fallbrook indicates that projects planned for the next five years within areas likely to contain the constituent elements include routine maintenance and various construction activities.

Some of these activities could trigger the need for additional formal consultations, project delays, and overhead.

Proposed projects and ongoing maintenance requirements exist in areas that do not contain primary constituent elements, yet that are currently proposed as critical habitat. Therefore, the base anticipates that these activities would trigger a consultation process that would otherwise not exist. Detachment Fallbrook indicates that they are also concerned that the ongoing ability to maintain clearing zones and fire/safety breaks may be limited under the critical habitat designation. A final concern expressed by the base deals with the human health and safety issues associated with the local community immediately adjacent to the eastern boundary. The threat of wildfire and the associated liability issues may pose significant concerns to Detachment Fallbrook, should the critical habitat designation cause a change in the current management of these fire/safety clear zones. While FWS guidance suggests that exemptions will allow for all emergency activities, the base is concerned that critical habitat may cause a change in the current management of their fire/safety zones.

Exhibit 4-2 FEDERAL LANDS (U.S. NAVY): SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION FOR THE GNATCATCHER					
Description of Current and Planned Land Uses or Activities That May Impact Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?*	Additional Modifications Under Critical Habitat Designation?*	Estimated Impacts From Critical Habitat Designation Only?
Military training (Naval Weapons Station Seal Beach, Detachment Fallbrook)	6	Potential habitat destruction/modification	Possibly	No	Potential additional or reinitiated consultations; project delays
*Possible modifications are based on guidance from FWS staff in Carlsbad, CA office. Sources: (1) Doug Krofta, Biologist, FWS, personal communication, April 24, 2000; (2) Public comments provided by U.S. Navy in response to proposed designation of critical habitat for the gnatcatcher, April 7, 2000; (3) Personal communication with Robbie Knight, Jan Larson, and Dave Bailey, U.S. Navy, May 9, 2000. (4) Personal communication with Robbie Knight, U.S. Navy, May 12, 2000.					

IMPACTS OF CRITICAL HABITAT ON NON-FEDERAL PUBLIC LAND

State, county, and local public land ownership accounts for the smallest percentage of lands proposed as critical habitat for the gnatcatcher. Of the nearly 800,000 acres proposed for designation, only 5 percent (37,513 acres) of lands are owned by state, county, or local government entities. Uses of these lands can only be restricted under designation of critical habitat when activities on those lands involve a Federal nexus.

Examples of Current and Planned Uses of Non-Federal Public Lands

San Diego County Water Authority

The San Diego County Water Authority (the "Authority") owns approximately 230 miles of pipeline in San Diego County. These pipelines run across 150-foot wide to 200-foot wide strips of land which are owned by the Authority. In addition, the Authority operates and maintains numerous flow control facilities. These pipelines and flow control facilities serve to supply water to 23 member agencies located in San Diego County. Presently, the Authority's pipeline infrastructure consists of five large diameter aqueduct pipelines which carry water from a Metropolitan Water District storage facility located in Riverside County.

Activities on lands owned by the Authority can only be restricted under designation of critical habitat when the activities involve a Federal nexus (i.e., Federal permits, Federal funding, or other Federal actions). Exhibit 4-3 shows projects on non-Federal public lands either being considered or presently underway which involve a Federal nexus.¹² According to guidance from FWS staff, designation of critical habitat is not expected to require additional modifications to these land uses and activities above and beyond modifications that already exist under the ESA listing of the gnatcatcher.

¹² Tim Cass, San Diego County Water Authority, personal communication, April 26, 2000.

<p align="center">Exhibit 4-3</p> <p align="center">STATE AND LOCAL LANDS:</p> <p align="center">SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION</p> <p align="center">FOR THE CALIFORNIA GNATCATCHER</p>					
Description of Current and Planned Land Uses or Activities That May Impact Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?*	Additional Modifications Under the Proposed Critical Habitat Designation?*	Estimated Impacts From Critical Habitat Designation Only?
Reservoir Construction	1	Section 404 permit	Possibly	No	Potential reinitiated consultations; project delays
Pipeline Construction	1,2,3,4,7	Section 404 permit	Possibly	No	Potential reinitiated consultations; project delays
Joint Pipeline Project (with the Metropolitan Water District of Southern California) ¹	7	Section 404 permit	Possibly	No	Potential reinitiated consultations; project delays
<p>* Possible modifications are based on guidance from FWS staff in Carlsbad, CA office.</p> <p>Sources: (1) Tim Cass, San Diego County Water Authority, personal communication, April 26, 2000.</p> <p>¹ Planned but not approved for implementation.</p>					

A major concern expressed by the Authority is that the proposed critical habitat boundary may result in additional Section 7 consultations with the FWS. Although the Authority acknowledges that additional consultation may not be required in all cases, they note that a significant degree of uncertainty exists in the present gnatcatcher critical habitat proposal. Specifically, the Authority believes that the definition of the primary constituent elements that define suitable critical habitat for the gnatcatcher is ambiguous. Thus, the Authority feels that this uncertainty places on them the burden of proof and costs to demonstrate the absence of constituent elements.

Based on the current proposed critical habitat designation, the Authority is concerned that two potential outcomes that may result if FWS finds that the Authority's lands contain critical habitat. First, the Authority believes that additional consultation may be required above and beyond those that would occur under a listing. Further consultations may in turn cause delays in projects. If additional

consultations create delays to reservoir construction projects, for example, the Authority believes they will incur additional project financing and other costs. Second, the Authority is concerned that additional consultations will create additional administrative burden, by requiring them to divert limited staff resources from other productive activities in order to undergo a consultation. Because the uncertainty surrounding the definition of critical habitat and the likelihood of additional consultations associated with critical habitat may affect these and other land uses, these impacts are addressed in separate sections of the report (see "Impacts Due to Uncertainty" and "Impacts Due to Project Delays").

Riverside County Flood Control and Water Conservation District

Unit 12 of the proposed critical habitat for the California gnatcatcher includes the Riverside County Flood Control and Water Conservation District (the "District"), which owns, operates, maintains, and restores numerous flood control facilities throughout western Riverside County. Facilities managed by the District include dams, basins, channels, and levees. In addition to regular flood control operations, the District is responsible for restoring flood control facilities immediately following major flood events, as well as other actions that prepare facilities for the next storm season. For example, if a watershed is burned, the District provides increased debris storage in downstream facilities before the start of the next storm season.

Activities on lands owned by the District can only be restricted under designation of critical habitat when the activities involve a Federal nexus (i.e., Federal permits, Federal funding, or other Federal actions). Exhibit 4-4 shows typical projects in the District that may involve a Federal nexus. These projects were identified based on information provided by District staff.¹³ According to guidance from FWS staff, designation of critical habitat is not expected to require additional modifications to these land uses and activities above and beyond modifications that already exist under the ESA listing of the gnatcatcher.

¹³ Zully Smith, Riverside County Flood Control and Water Conservation District, personal communication, April 25, 2000.

<p align="center">Exhibit 4-4</p> <p align="center">STATE AND LOCAL LANDS:</p> <p align="center">SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION</p> <p align="center">FOR THE CALIFORNIA GNATCATCHER</p>					
Description of Current and Planned Land Uses or Activities That May Impact Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?*	Additional Modifications Under the Proposed Critical Habitat Designation?*	Estimated Impacts From Critical Habitat Designation Only?
Emergency restoration/hazard mitigation (Riverside County Flood Control and Water Conservation District)	12	Section 404 permit; FEMA funding for hazard mitigation	Possibly	No	Potential additional or reinstituted consultations; project delays
<p>* Possible modifications are based on guidance from FWS staff in Carlsbad, CA office. Source: Zully Smith, Riverside County Flood Control and Water Conservation District, personal communication, April 25, 2000.</p>					

Because gnatcatchers are not present at many of the District's facilities included within the boundaries of proposed critical habitat, nor do many of these facilities possess the primary constituent elements for gnatcatcher habitat, the District is not currently subject to Section 7 consultations under the listing for changes made to these facilities. Thus, the District feels that additional or more extensive consultations may be required under the proposed critical habitat that would not take place under the ESA listing of the gnatcatcher. The District's perception is that the time and effort required to conduct additional Section 7 consultations under designated critical habitat may create project delays and additional permitting costs, as well as possible delays in flood control maintenance and restoration activities. Furthermore, the District is concerned that the potential for a lengthy Section 7 consultations required for emergency maintenance activities may delay emergency operations and thereby increase the potential for significant flood damages. FWS guidance states that special exemptions allow for all emergency activities, and thus critical habitat will place no additional modifications on uses of these facilities. Nonetheless, we explore both of these categories of potential impacts in a separate section of the report (see "Impacts Due to Uncertainty" and "Impacts Due to Project Delays").

IMPACTS OF CRITICAL HABITAT ON PRIVATE LAND

Private landholders own the vast majority (634,080 acres), or 79 percent, of the nearly 800,000 acres of land proposed as critical habitat for the gnatcatcher. In order for private land uses or activities to be affected by the proposed designation of critical habitat, a Federal nexus must exist (i.e., land uses or activities that involve Federal permits, Federal funding, or other Federal actions). For example, private developers may be required to obtain a Section 404 permit issued by the U.S. Army Corps of Engineers if development includes building across dry washes. Activities on private lands that do not involve a Federal nexus are not affected by the designation of critical habitat.

Privately owned lands located in the proposed critical habitat are distributed across all proposed critical habitat units with the exception of Units 2, 5, and 6 (Marine Corps Air Station, Miramar; Marine Corps Base Camp Pendleton; and Fallbrook Naval Weapons Station, respectively). Exhibit 4-4 displays the potential impacts from the proposed critical habitat designation raised in public comments, public hearings, and phone conversations by private landowners, building associations, legal counsel representing landowners, and development companies. According to guidance from FWS staff, critical habitat designation is not expected to require additional modifications to these land uses and activities above and beyond modifications that already exist under the ESA listing of the gnatcatcher. A more detailed discussion of examples of these current and proposed private land uses, possible Federal nexuses, and private landowner concerns about economic impacts is provided below.

Examples of Current and Planned Uses of Private Lands

San Luis Rey Municipal Water District, North San Diego County

The service area of the San Luis Rey Municipal Water District (the "District") consists of 3,000 acres of land located on the San Luis Rey River and its basins, ranging from the Pala Indian Reservation on the east to Interstate 15 to the west. Most of these lands are included in Unit 7, the critical habitat unit which includes the North County Subarea of the Multiple Species Conservation Plan (MSCP) for Unincorporated San Diego County. Activities on District lands consist primarily of irrigation of tree crops, pastures, row crops, and dairies; sand mining and camping also take place on these lands.

Changes to current irrigation activities may require Section 404 and Section 401 permits issued by the U.S. Army Corps of Engineers in the event that these activities require alteration of stream beds. According to guidance from FWS staff, designation of critical habitat is not expected to place any additional required modifications on uses of San Luis Rey District lands above and beyond modifications that already exist under the listing. Existing mining operations and camping activities on these lands are not likely to involve a Federal nexus, and therefore will not be affected

by the designation of critical habitat. However, new mining operations may involve a Federal nexus and thus be affected by the designation of critical habitat.

<p align="center">Exhibit 4-5</p> <p align="center">PRIVATELY OWNED LANDS:</p> <p align="center">SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION</p> <p align="center">FOR THE GNATCATCHER</p>					
Description of Current and Planned Land Uses or Activities That May Have an Impact on Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?	Additional Modifications Under the Proposed Critical Habitat Designation?	Estimated Impacts From Critical Habitat Designation Only?
Current and planned irrigation of crops (San Luis Rey Municipal Water District)	7	Section 404 permit	Possible	No	Potential new and reinitiated consultations; project delays
<p>* Possible modifications are based on guidance from FWS staff in Carlsbad, CA office.</p> <p>Source: (1) Public comments received in response to the proposed critical habitat designation for the gnatcatcher; (2) personal communication with Susan Trager, April 25, 2000.</p>					

Rancho Mission Viejo, Orange County

Rancho Mission Viejo (RMV) is a working ranch consisting of 30,382 acres located in southern Orange County. RMV raises cattle and grows citrus crops, barley, and other market produce on a seasonal basis. In addition to these activities, RMV leases portions of their property to a nursery, sand and gravel processing and mining operations, materials recovery and processing facilities, and government research facilities. Furthermore, the ranch has developed portions of its property. Due to increased demand for residential housing in Orange County, RMV intends to develop additional lands.

Activities on lands owned by RMV can only be restricted under designation of critical habitat when the activities involve a Federal nexus (i.e., Federal permits, Federal funding, or other Federal actions). Exhibit 4-6 shows projects currently underway or being planned which may involve a

Federal nexus.¹⁴ According to guidance from FWS staff, designation of critical habitat will not require additional modifications to these land uses and activities above and beyond modifications that already exist under the ESA listing of the gnatcatcher.

<p align="center">Exhibit 4-6</p> <p align="center">PRIVATELY OWNED LANDS:</p> <p align="center">SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION</p> <p align="center">FOR THE CALIFORNIA GNATCATCHER</p>					
Description of Current and Planned Land Uses or Activities That May Impact Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?*	Additional Modifications Under the Proposed Critical Habitat Designation?*	Estimated Impacts From Critical Habitat Designation Only?
Current ranching activities	8	Unclear	Possibly	No	Potential additional consultations; project delays
Current development: 4,000-acre Ladera Planned Community	8	Unclear	Possibly	No	Potential additional consultations; project delays
Planned residential development	8	Section 404 permit	Possibly	No	Potential additional consultations; project delays
<p>* Possible modifications are based on guidance from FWS staff in Carlsbad, CA office. Source: Richard Broming, Vice President, Planning and Entitlement, Rancho Mission Viejo, personal communication, April 26, 2000.</p>					

Rancho Mission Viejo believes that two types of economic impact may result from the proposed designation of critical habitat, including: (1) additional Section 7 consultations; and (2) increased planning efforts. RMV believes that their current ranch activities could be subject to Section 7 consultations even though these areas do not currently support gnatcatchers or coastal sage scrub. The ranch believes that additional Section 7 consultations could be required because, in

¹⁴Richard Broming, Vice President, Planning and Entitlement, Rancho Mission Viejo, personal communication, April 26, 2000.

their experience, the U.S. Army Corps of Engineers uses an expansive interpretation of areas that constitute "waters of the United States." RMV also sees potential for additional Section 7 consultations during the approval process for their residential development projects. For example, RMV believes the proposed critical habitat designation may affect their currently approved Ladera project.

A second category of costs that RMV perceives may result from the proposed critical habitat designation is the need for additional planning for development projects. To date, RMV has invested over \$1.5 million working on the Southern Subregion NCCP effort, under which their 4,000-acre planned Ladera community was approved. RMV's concern is that the critical habitat designation may render existing plans null and void, thereby creating the need for significant additional planning.

Undeveloped land parcel, Riverside County

A review of current and proposed activities on an undeveloped, private land parcel located in Riverside County was conducted based upon information from comments submitted on behalf of the property owners, as well as a phone interview with the property owners' legal counsel. This small property (2.37 acres), which is located near the cities of Temecula and Murrieta Hot Springs, is a vacant lot which contains no sage scrub or other vegetation. While the present owners do not intend to develop the parcel, they anticipate that one of several adjacent subdivisions would purchase the parcel to incorporate it into existing development.

As shown in Exhibit 4-7, it is not clear if a Federal nexus exists for current or planned activities on this parcel. Despite the absence of a direct Federal nexus for the current and planned uses of this property, the owners of this property remain concerned that the stigma associated with inclusion in critical habitat may affect the value of the parcel and/or the potential for an eventual sale transaction. Because public perception of critical habitat may affect private real estate transactions, these impacts are addressed in Section 5 of this report (see "Impacts Due to Public Perception").

Exhibit 4-7 PRIVATELY OWNED LANDS: SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION FOR THE GNATCATCHER					
Description of Current and Planned Land Uses or Activities That May Have an Impact on Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?	Additional Modifications Under the Proposed Critical Habitat Designation?	Estimated Impacts From Critical Habitat Designation Only?
Current and planned land development (Riverside County)	12	Unclear	Possibly	No	Potential loss in property value
* Possible modifications are based on guidance from FWS staff in Carlsbad, CA office. Source: (1) Public comments received in response to the proposed critical habitat designation for the gnatcatcher; (2) personal communication with Susan Trager, April 24, 2000.					

The Barnham Ranch, Orange County

The Barnham Ranch (the “ranch”) is a 526-acre property located in unincorporated Orange County, east of the city of Orange and south of Anaheim. The ranch has steep topography, diverse biological resources, and is a relatively undisturbed site. It contains rich examples of sage scrub habitat and an extensive inland wetlands system which provides important connectivity with coastal sage, oak woodlands, and riparian habitats found in adjacent protected parklands. Access to the ranch is limited, and primary land uses on the ranch are hiking, wildlife viewing, and horseback riding. At present, the ranch property is not included in the proposed critical habitat for the gnatcatcher.

As shown in Exhibit 4-8, efforts to set aside the ranch for conservation represent a unique category of potential benefit resulting from critical habitat designation. As the ranch is one of few remaining open space properties in southern California possessing important biological resources and rare habitats for the gnatcatcher (and other threatened and endangered species), the ranch property has attracted significant interest for its conservation potential. Currently, the Orange Unified School District owns the property and intends to trade it (to a developer or to Orange County) in exchange for a suitable school site. Proponents for ranch conservation believe that including the ranch within the boundaries of critical habitat for the gnatcatcher would provide a public relations benefit to their conservation effort. Their reasoning is that incorporating the ranch in critical habitat would confirm that the ranch's value as an ecological preserve for the gnatcatcher (and other species) outweighs its

development value, particularly in light of the initial investment that would be necessary to create full access to the ranch and to grade its steep slopes.¹⁵

Exhibit 4-8					
PRIVATELY OWNED LANDS: SUMMARY OF IMPACTS UNDER THE PROPOSED CRITICAL HABITAT DESIGNATION FOR THE GNATCATCHER					
Description of Current and Planned Land Uses or Activities That May Have an Impact on Suitable or Occupied Habitat	Critical Habitat Unit(s) Potentially Affected	Possible Federal Nexus	Possible Modifications Under the ESA Listing?	<i>Additional</i> Modifications Under the Proposed Critical Habitat Designation?	Estimated Impacts From Critical Habitat Designation Only?
Planned conservation acquisition: Barnham Ranch, Orange County	Not included in proposed critical habitat designation	None likely, if set aside for conservation	Possibly	No	Possible conservation benefit
<small>* Possible modifications are based on guidance from FWS staff in Carlsbad, CA office. Source: (1) Public comments received in response to the proposed critical habitat designation for the gnatcatcher; (2) personal communication with Scott Ferguson, Trust for Public Lands, April 25, 2000.</small>					

OTHER POTENTIAL IMPACTS

Some Federal activities have been identified as potential concerns, but are not addressed in the summaries above. Other Federal activities constituting a nexus include:

- ! BLM regulation of grazing, mining, and recreational activities;
- ! Sale, exchange, or lease of lands by Bureau of Land Management and Department of Energy;

¹⁵Based on personal communication with Scott Ferguson, Trust for Public Lands, April 25, 2000.

- ! Regulation of water flows, water delivery, damming, diversion, and channelization by the Bureau of Reclamation and U.S. Army Corp of Engineers;
- ! Funding and implementation of disaster relief projects by Federal Emergency Management Agency;
- ! Funding and regulation of new road construction by Federal Highway Administration;
- ! Vegetation clearing by Department of Energy; and
- ! Environmental Protection Agency air and water quality standards.

These potential Federal nexuses are not present for the land uses described in this analysis of designated critical habitat for the gnatcatcher. Nonetheless, if such Federal nexuses pertain to land designated critical habitat for the gnatcatcher, a Section 7 consultation may result. It is unlikely that Section 7 consultations required by these nexuses would result in modifications to activities and land uses.

IMPACTS DUE TO UNCERTAINTY AND PUBLIC PERCEPTION

SECTION 5

As noted throughout this report, FWS guidance suggests that no additional modifications to land uses and activities will be required above and beyond modifications that already exist under the ESA listing of the gnatcatcher. This implies that the designation of critical habitat will have no additional economic impacts beyond those that will be experienced as a result of the listing. However, even if modifications on land use are the same for land within the critical habitat designation as for land outside of the critical habitat designation, evidence suggests that lands within the critical habitat designation often experience two types of *indirect* economic impacts. First, uncertainty surrounding the definition of critical habitat could prompt some landowners to undertake steps to reduce that uncertainty, thereby incurring transaction costs. Moreover, uncertainty may create delays, or in some cases, changes to land use decision making, and may result in opportunity costs. Second, while FWS believes that, in most cases, the critical habitat designation for the gnatcatcher will not require additional modifications to land uses beyond those experienced due to the listing, the public may *perceive* the risk of additional modifications. This perception may result in real reductions in land values and real estate transactions. Below, we describe each of these indirect economic impacts in more detail.

Costs Associated with Uncertainty of Critical Habitat Impacts

Perceptions held by land owners and potential buyers about changes in the attributes and characteristics of property can affect land values in much the same way as actual changes in property attributes. For example, a perception held by potential buyers that crime is high in a given neighborhood, though the area may actually be safe, can negatively influence the value of individual properties in the neighborhood. Likewise this concept, which is well-documented for perceptions of property attributes which have negative effects, can be attributed to such attributes as proximity to a hazardous waste landfill and contamination of groundwater. Whereas, the proximity to good local schools can generate positive value effects. Often, a single event or series of events, for example, the publication of a newspaper article or a succession of crimes, create the change in public attitudes which in turn cause a change in the value of property. As more information on actual neighborhood attributes becomes available to the market over a period of time, the influence of the public's initial

perception diminishes. Impacts on property values which still remain after relevant information is absorbed by the market can result from actual modifications to property attributes.

To evaluate the economic impacts associated with uncertainty over designation of critical habitat for the gnatcatcher, it is necessary to review comments and information provided by owners of lands residing within the boundaries of designated critical habitat. In the case of proposed critical habitat for the gnatcatcher, numerous landowners commented that uncertainty arises because the proposed designation lacks specificity with respect to: (1) geographic descriptions of the critical habitat boundaries; and (2) the primary constituent elements that define suitable habitat. Owners state that this uncertainty makes it difficult to anticipate whether FWS is likely to consider their lands as critical habitat for the gnatcatcher. Likewise, it is not clear to land owners whether they are likely to experience direct impacts due to the designation, such as additional consultations or required modifications to activities.

Many land owners have elected to retain counsel, surveyors, and other specialists to determine whether specific parcels lie within critical habitat boundaries, and/or whether the primary constituent elements are present on parcels. Thus, uncertainty over the critical habitat status of lands has the potential to create real economic losses as land owners incur costs to reduce and/or mitigate the effects of this uncertainty.

Costs Associated with Public Perception of Critical Habitat Impacts

Public comments and information provided by land owners of all types suggest that the perception of additional modifications due to critical habitat designation, even when actual modifications do not occur. This perception may result in real reductions in land values and real estate transactions. Over time, as the public awareness grows that critical habitat will not result in additional modifications, the impact of designation of critical habitat on property markets can be expected to decrease to the level of impacts associated with listing modifications and the potential costs of additional consultations associated with designation of critical habitat, as discussed in Section 4 of this report.

To explain property market impacts due to public perception of the critical habitat designation, it is necessary to examine key events associated with the listing and the critical habitat designation for the gnatcatcher: (1) ESA listing; (2) proposal of critical habitat. Exhibit 5-1 illustrates the possible impacts on property markets resulting from each of these events.

- 1. ESA listing** — The initial impact of the gnatcatcher listing on property markets may have been limited because FWS guidance, in the form of a map, on which areas were subject to listing modifications, was unavailable. The public also may not have been fully aware of how listing modifications would affect land uses and activities. Therefore, it is likely that the potential effects

of the listing on property markets were only partially felt at the time of the listing (March 27, 1995).

2. Proposed Critical Habitat — The proposal of critical habitat may cause two types of effects that have resulted in impacts to property markets:

! Greater Public Awareness of Areas Subject to Modifications:

The proposal of critical habitat included the issuance of a map designating fifteen units of land as potential critical habitat areas. Although all of these units, as well as other areas, were already subject to listing modifications, no map was issued with the listing. Therefore, the critical habitat designation map likely increased public awareness of areas subject to modifications, thereby increasing listing impacts that may not have been fully felt at the time of the gnatcatcher listing.

! Public Perception that Critical Habitat Designation Will Result in Additional Modifications:

Public perception that critical habitat designation might involve additional modifications, above and beyond existing modifications under the ESA listing, also may have negatively affected property markets. This public perception may have resulted in economic impacts to property markets above and beyond those caused by listing modifications. Over time, as public awareness grows that critical habitat designation will not result in additional modifications, the impact of critical habitat designation on property markets can be expected to subside. Those impacts associated with listing modifications will remain. The economic impacts due to public perception of critical habitat designation are illustrated by the hatched area in Exhibit 5-1. The scale of these effects depends on how great the initial impacts of public perception are on property markets and the length of time it takes for the perceptions to diminish as public awareness grows that designation of critical habitat will not result in additional modifications.

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SOCIAL AND COMMUNITY IMPACTS

SECTION 6

Under the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996) whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions).¹⁶ However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. This section addresses the potential impacts to small entities and communities located within the proposed critical habitat designation.

This rule will not have a significant economic impact on a substantial number of small entities because it imposes very little, if any, additional impacts on land use activities beyond those that may be required as a result of the listing of the gnatcatcher. Because the gnatcatcher is a Federally protected species, landowners prohibited from taking the species, which is defined under the Act to include such activities that would harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. As a result, any future consultations with FWS are likely to occur to avoid any such activities that would result in an incidental take of the gnatcatcher. Therefore, proposed modifications to such activities recommended by FWS would be attributable to the presence of the gnatcatcher on a landowner's property and not due to the presence of critical habitat.

It is possible that some small entities and communities may incur direct costs resulting from the designation of critical habitat above and beyond those attributable to the listing of the gnatcatcher as a threatened species. Such costs may include as a result of critical habitat may include: (1) the value of time spent in conducting Section 7 consultations beyond those associated with the listing of the gnatcatcher, and (2) delays in implementing public and private development projects losses, which may result in losses to individuals and society. In the first instance, FWS believes that such additional consultations would be unlikely to occur because FWS is not designating any critical habitat that is currently unoccupied by the gnatcatcher. While some small businesses and communities could suffer

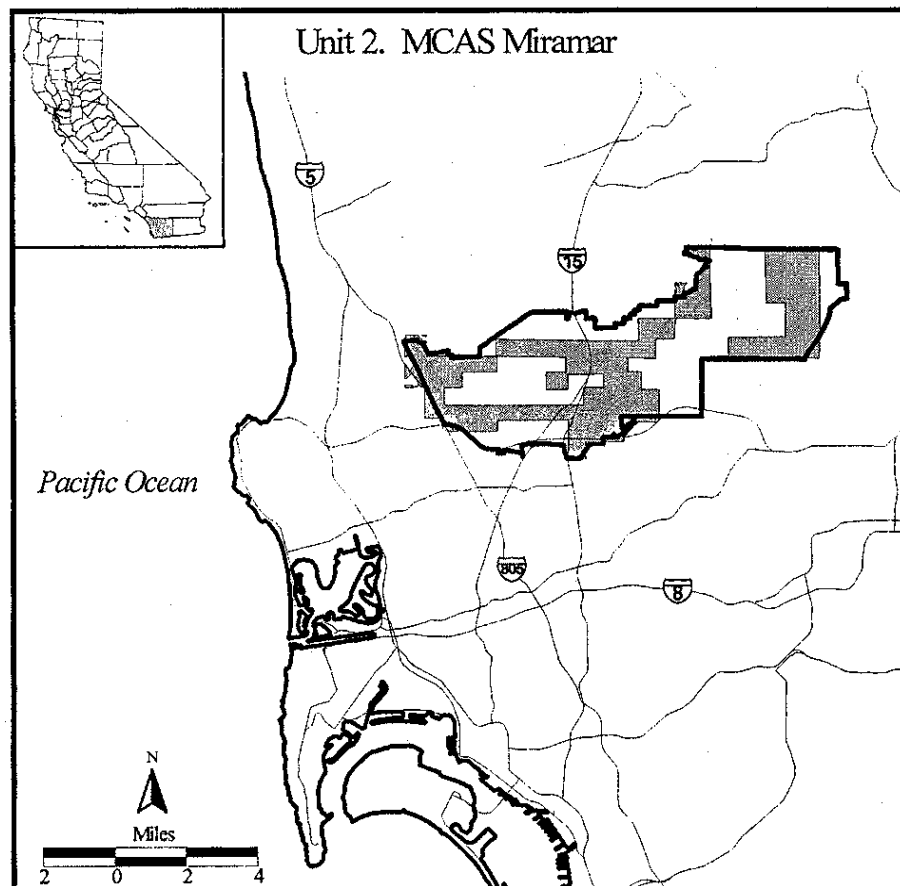
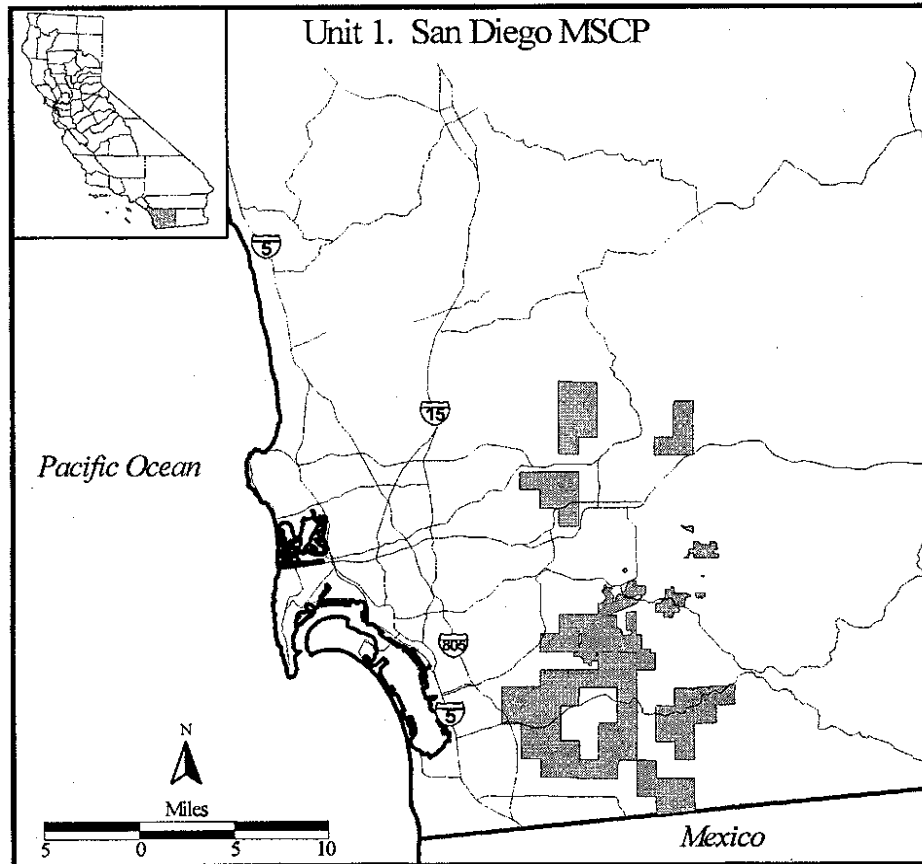
¹⁶ 5 U.S.C. 601 et seq.

some losses under the second scenario, this impact is unlikely to cause a significant impact on a substantial number of small entities because entities would only be affected to the extent that: (1) property transactions take place during this time of uncertainty; and (2) that the price of such property undergoing a transaction reflects such a concern by the buyer. While these potential impacts on small businesses and communities were not addressed quantitatively in this analysis we solicit additional information that would inform such an assessment of incremental impacts of proposed critical habitat.

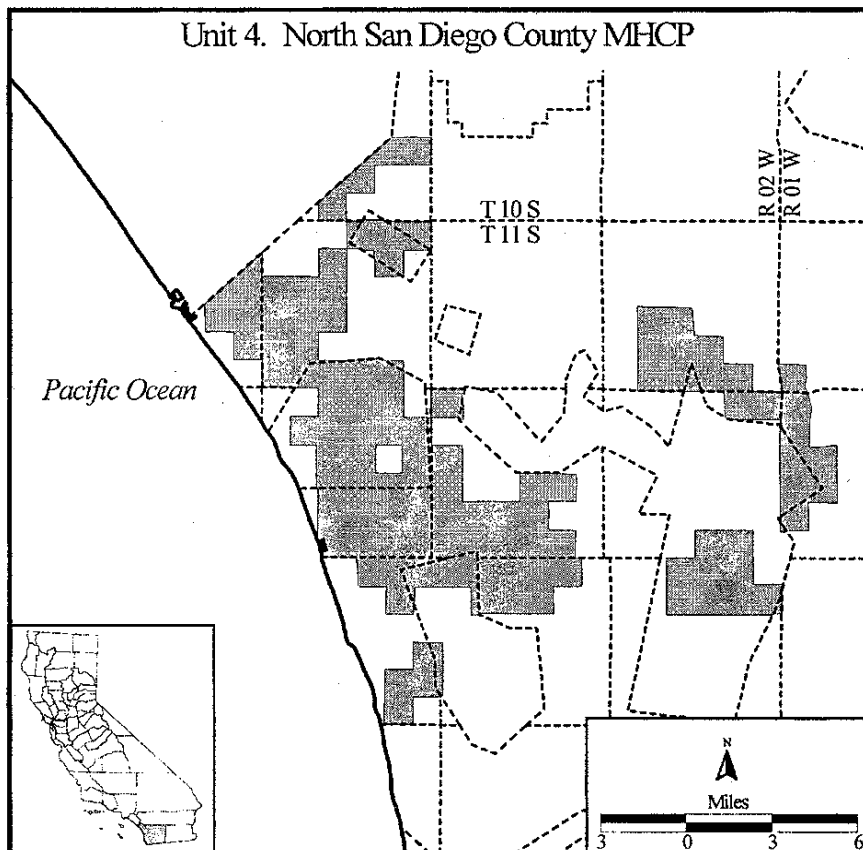
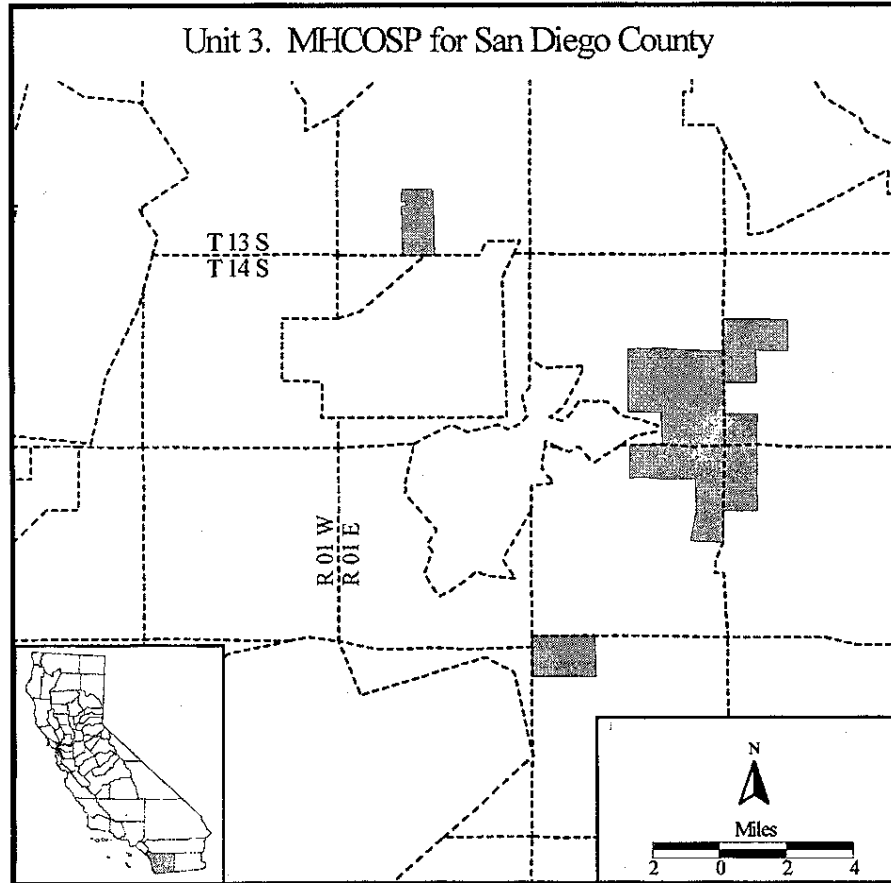
CRITICAL HABITAT UNIT MAPS

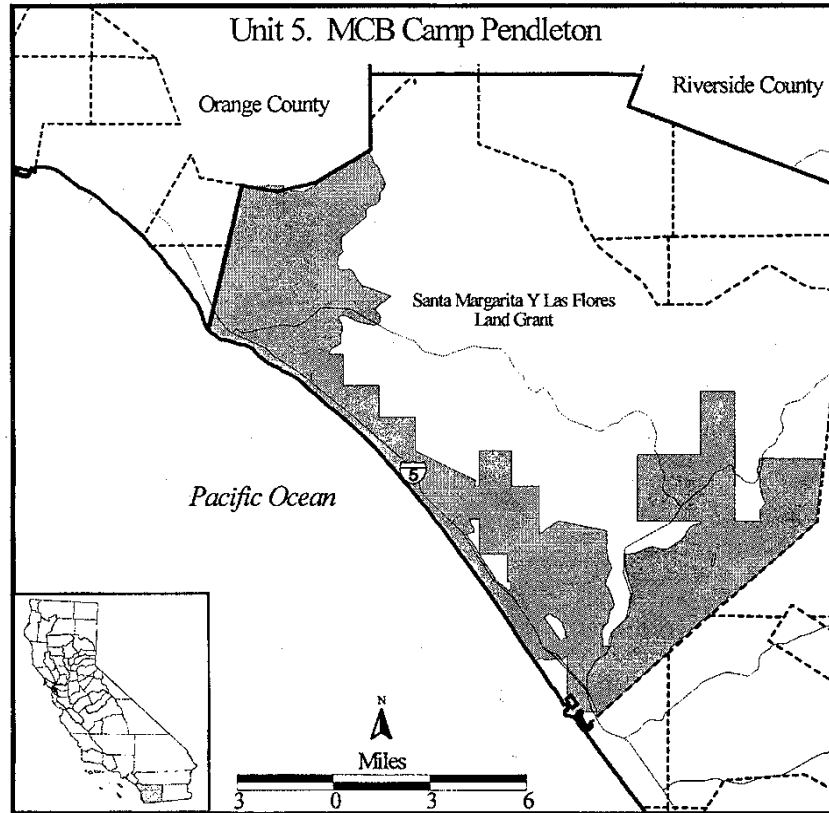
APPENDIX A

The following Geographic Information System (GIS) maps provided by FWS staff show each of the fifteen individual units.

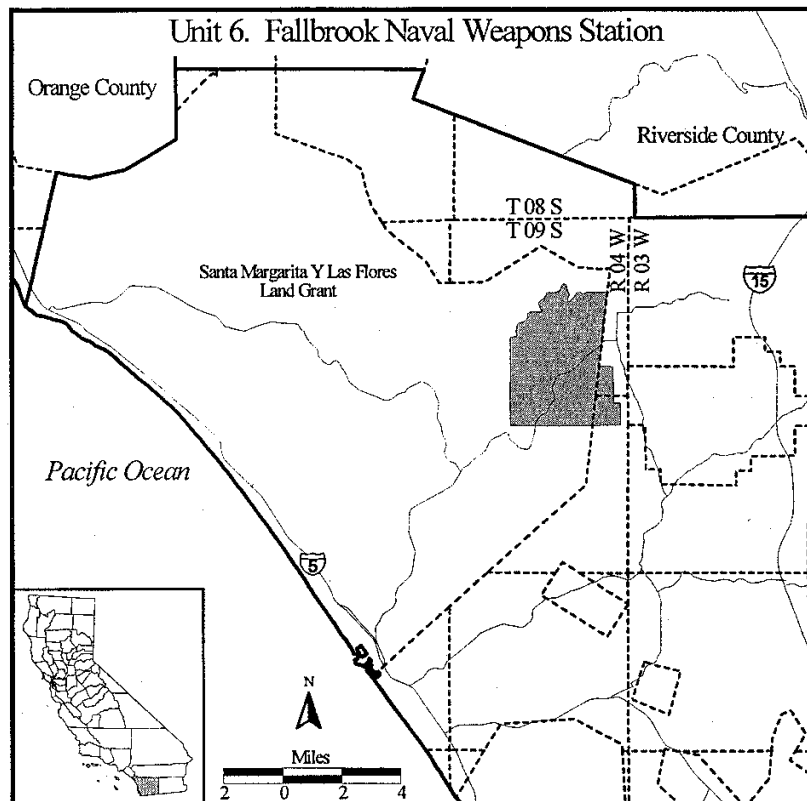


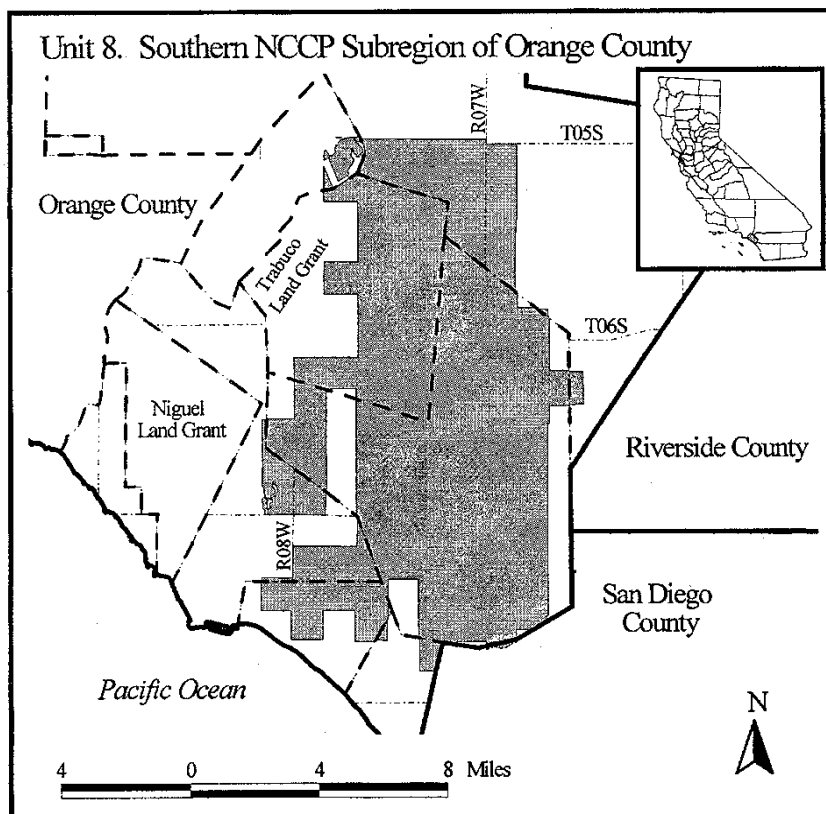
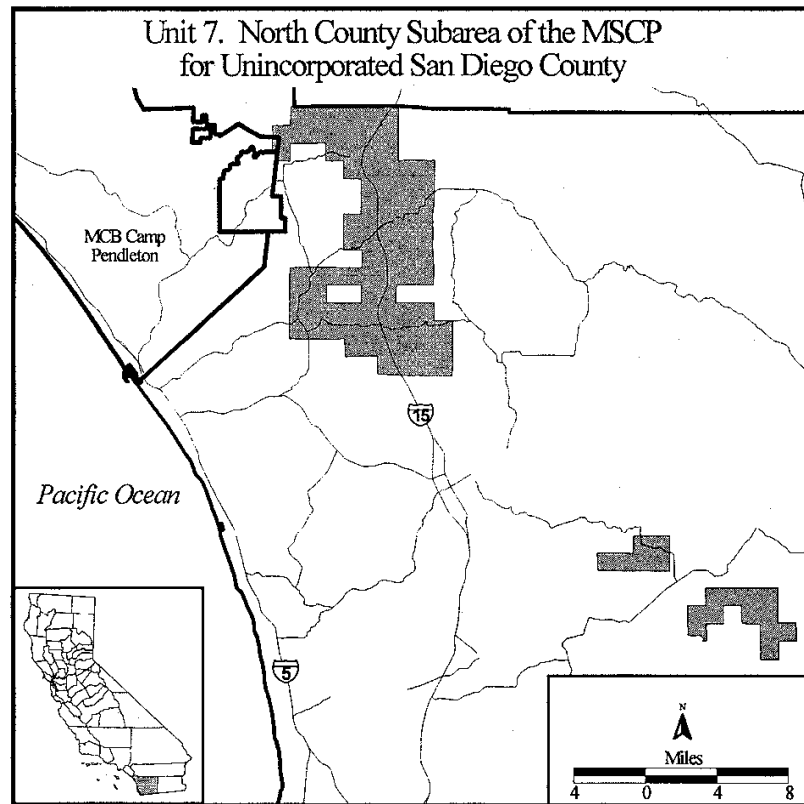
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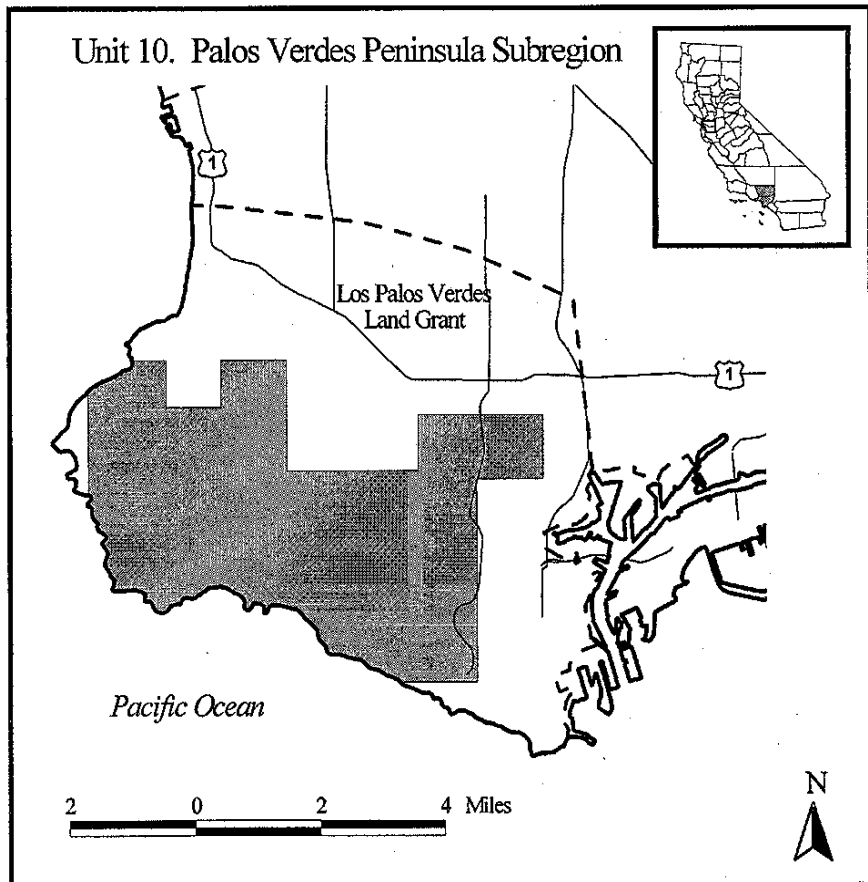
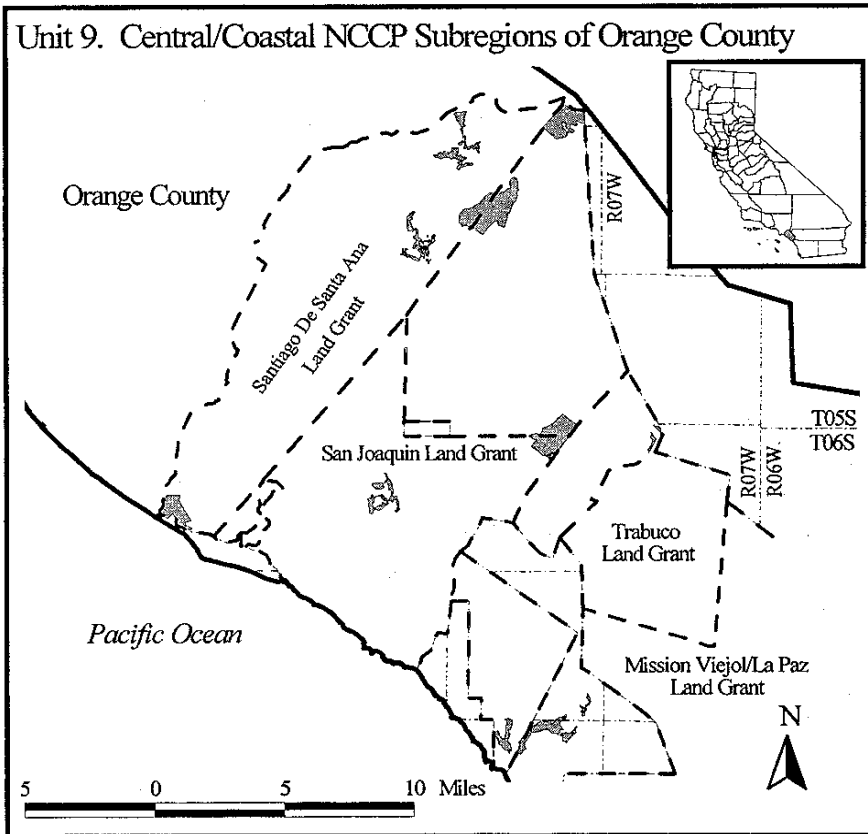


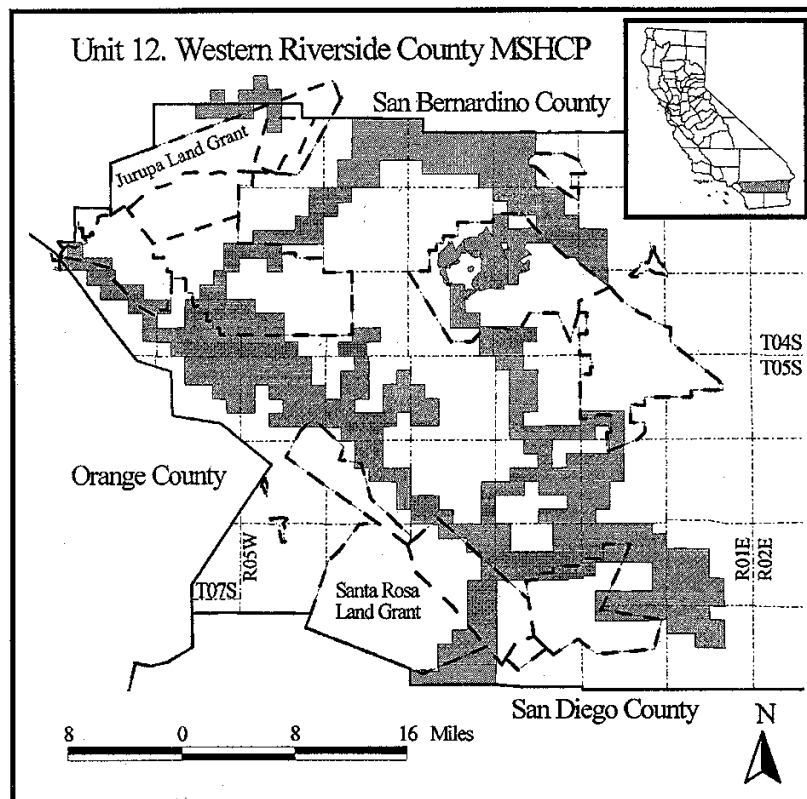
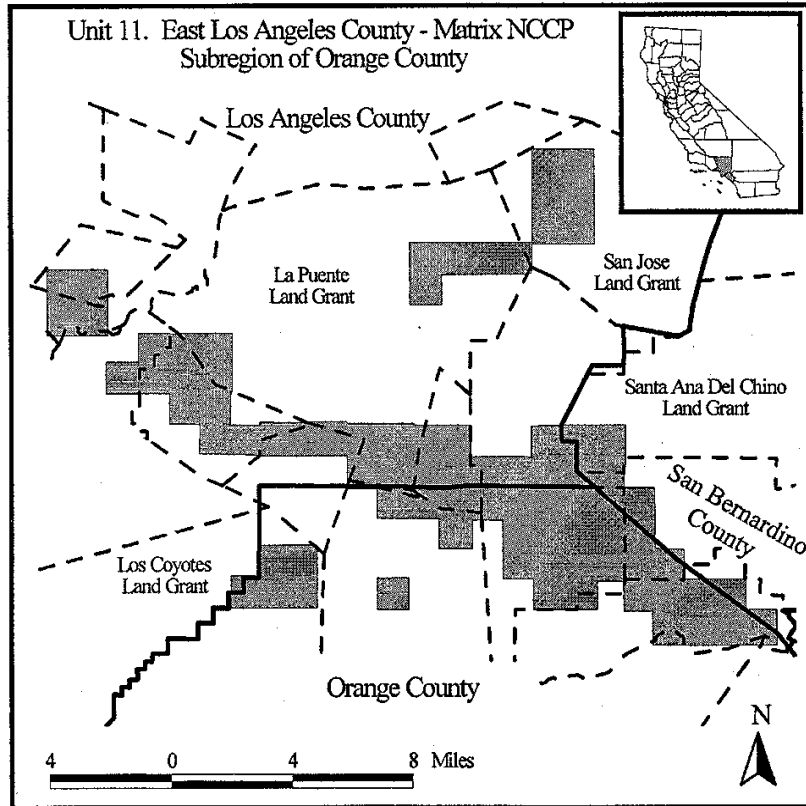


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Unit 13.
Available.

N o M a p

